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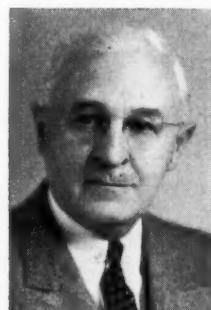
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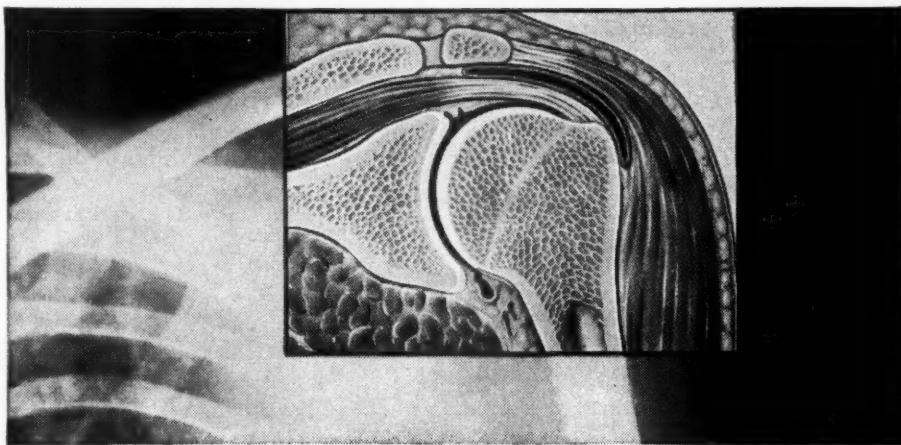
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 A. H. Price, M.D. (1954) 62 W. Kirby, Detroit
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(Continued on Page 1146)

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MSMS Committee Personnel 1953-1954

(Continued from Page 1144)

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L. A. Pratt, M.D.....	3919 John R., Detroit
E. C. Swanson, M.D.....	Vassar
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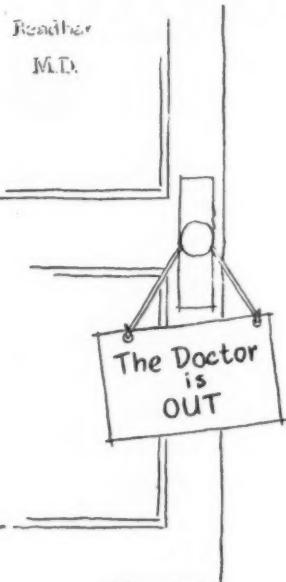
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Mr. W. F. Doyle.....	Hollister Bldg., Lansing
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L. J. Hirschman, M.D.....	2619 Munson Ave., Traverse City
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W. S. Jones, M.D.....	1146 Tenth Ave., Menominee
W. M. LeFevre, M.D.....	289 W. Western Ave., Muskegon
Professor Emil Lorch.....	1023 Forest Ave., Ann Arbor
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Representing S.E. Michigan Division, American Cancer Society	
Judge George Edwards, Probate Ct., 1025 E. Forest Ave., Detroit 7	
Representing S.E. Michigan Division, American Cancer Society	
A. E. Heustis, M.D.....	Michigan Department Health, Lansing
Representing Michigan Department of Health	
R. C. Hildreth, M.D.....	458 W. South, Kalamazoo
Representing Michigan State Medical Society	
L. E. Holly, M.D.....	876 Second St., Muskegon
Representing Michigan Division, Inc., American Cancer Society	
W. A. Hyland, M.D.....	Metz Bldg., Grand Rapids
Representing Michigan State Medical Society	
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B. E. Luck, D.D.S.....	1512 Olds Tower, Lansing
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Representing Michigan State Medical Society	
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Representing S.E. Michigan Division, American Cancer Society	
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Representing Michigan Division, Inc., American Cancer Society	
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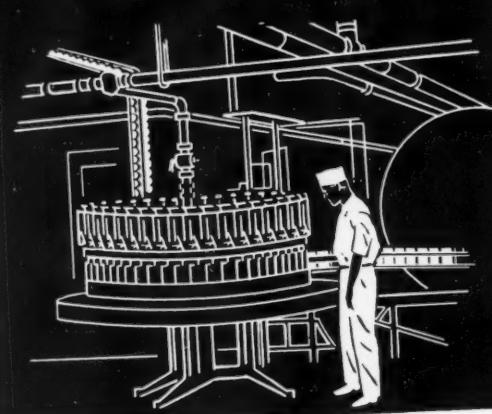
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HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

September 20 and 25, 1953

Three meetings of The Council were held during the 88th Annual Session of The Michigan State Medical Society in Grand Rapids. A total of ninety-five items was presented and discussed

chosen as vice-chairman; W. S. Jones, M.D., Menominee, was re-elected head of the Finance Committee; D. Bruce Wiley, M.D., Utica, was a repeat as chairman of the County Societies



The Council, Michigan State Medical Society, 1953-54

Front row (left to right): D. Bruce Wiley, M.D., Utica; R. H. Baker, M.D., Pontiac; H. B. Zemmer, M.D., Lapeer; Chairman William Bromme, M.D., Detroit; L. W. Hull, M.D., Detroit; W. S. Jones, M.D., Menominee; and L. Fernald Foster, M.D., Bay City.

Standing (left to right): R. J. Hubbell, M.D., Kalamazoo; Editor Wilfrid Haughey, M.D., Battle Creek; F. H. Drummond, M.D., Kawkawlin; G. B. Saltonstall, M.D., Charlevoix; B. M. Harris, M.D., Ypsilanti; W. M. LeFevre, M.D., Muskegon; H. H. Hiscock, M.D., Flint; W. A. Hyland, M.D., Grand Rapids; J. E. Livesay, M.D., Flint; R. S. Breakey, M.D., Lansing; Ralph W. Shook, M.D., Kalamazoo; B. T. Montgomery, M.D., Sault Ste. Marie; L. C. Harvie, M.D., Saginaw; and J. D. Miller, M.D., Grand Rapids.

Absent on MSMS Business: Arch Walls, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; W. D. Barrett, M.D., Detroit; W. B. Harm, M.D., Detroit; and K. H. Johnson, M.D., Lansing.

by the twenty-five members (eighteen Councilors, the Speaker and the Vice-speaker of the House of Delegates, the President, President-elect, Immediate Past president, Secretary, and Treasurer. Three-hundred-thirty-three (333) cumulative hours were contributed by these members of The Council to weigh and to decide upon the problems facing the entire medical profession of Michigan, including:

- **Reorganization of The Council:** William Bromme, M.D., Detroit, was re-elected Chairman; H. B. Zemmer, M.D., Lapeer, was again

Committee; and G. B. Saltonstall, M.D., Charlevoix, was given the post of Chairman of the Publication Committee.

- The monthly financial reports were studied and approved as well as the semi-annual balance sheet. Bills payable were reviewed and ordered paid.
- *The Treasurer's Report* on bonds was presented by Wm. A. Hyland, M.D., given study, and approved.
- *Council Chairman Bromme reported on the AMA Conference on Medical Care for Veterans*
(Continued on Page 1150)

How the greater efficiency of Kent's Micronite Filter is verified



Until the new KENT cigarette was introduced last year, factual evidence of the comparative efficiency of filter-tip cigarettes did not exist.

Realizing this, the makers of KENT decided to compare the efficiency of its exclusive Micronite Filter with other filters—and to release the findings to the general public.

On delicate analytical balances, the weight of the nicotine and tars left in smoke after passing through the Micronite Filter was compared with the weight of the irritants left in the smoke after passing through conventional filters.

These scientific comparison tests show that while conventional filters remove some irritants, KENT's Micronite Filter approaches 7 times the efficiency of other filters in the removal of

nicotine and tars and is virtually twice as effective as the next most efficient cigarette filter.

In addition, tests have been made on physiological reactions to cigarette smoke—and the findings have been released to the medical profession only.

These tests, without exception, show that KENT's Micronite Filter is the first to remove enough of the irritants from cigarette smoke to give susceptible smokers (about 1 out of every 3) the protection they need. At the same time, this filter lets through all the rich taste of fine tobaccos that gives smokers the satisfaction they want.

Already the new KENT has become so popular that it outsells brands on the market for years. If you have yet to try the new KENT, may we suggest you do so soon?



"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1148)

ans, held in Chicago September 1. Speaker R. H. Baker, M.D., read a proposed resolution on the subject of veterans' medical care which is to be presented to the MSMS House of Delegates on September 21.

- **MSMS headquarters:** Renovation on the porch and reception room at 606 Townsend, Lansing, which began September 2, 1953, was reported. A hand-carved caduceus to be placed over the entrance was presented to the Society by Wm. M. LeFevre, M.D., Muskegon, who was tendered a vote of sincere thanks by The Council.
- **Report on recommendations to streamline the AMA,** were made by R. H. Pino, M.D., Detroit. A special committee recommended that these recommendations be forwarded to Michigan's AMA delegates to facilitate together with a suitable resolution by Michigan's delegates to the AMA House of Delegates; this disposition is to be reported in the Supplemental Report of The Council.
- The recommendation of the Awards Committee that the MSMS create an award for outstanding reporting of medical progress, and that this year the award be presented to Mr. Jack Pickering of the *Detroit Times* for outstanding contribution to public understanding of medical and health progress, was approved by The Council.
- President-elect L. W. Hull, M.D., reported nominations and appointments made to the Cancer Co-ordinating Committee, representing the Michigan Division, American Cancer Society, the Southeastern Michigan Division, American Cancer Society, the Michigan Department of Health, the Michigan Health Officers Association, the Michigan State Dental Society, and the Michigan State Medical Society.
- Nominations for five vacancies (as of September 30, 1953) on the **Michigan State Board of Registration in Medicine** were made and forwarded to the Secretary of State, as per Section 1 of the Medical Practice Act.
- **Plans for the Beaumont Memorial Dedication,** scheduled for Mackinac Island, Saturday, July 17, 1954, were discussed.
- **1953 MSMS Annual Session:** Secretary L. Fernald Foster, M.D., reported that the MSMS Executive Office had sent 42,898 individual mailings to advertise the 1953 Annual Session in an endeavor to achieve a record registration for Grand Rapids.
- A congratulatory letter was ordered sent to the John Hancock Insurance Company for its excellent national advertisement "He Must Be There" which appeared in various leading magazines during August, 1953.

- A proposed **Resolution on the Mental Hygiene Program of Michigan**, drafted by H. B. Zemmer, M.D., was read and referred to the House of Delegates.
- The County Societies Committee nominated three candidates for Michigan's Foremost Family Physician award: Fred J. Drolett, M.D., Lansing; Joseph H. Sherk, M.D., Midland; and William J. Stapleton, Jr., M.D., Detroit. These nominations were referred to the House of Delegates.
- The Supplemental Report of The Council was read, amended in one item, and approved for reference to the 1953 House of Delegates.
- The Sub-committee on Intern Training (of the MSMS Committee on Postgraduate Medical Education) presented its report through H. A. Towsley, M.D., and J. M. Sheldon, M.D., of Ann Arbor, together with H. H. Cummings, M.D., of Ann Arbor, Chairman of the MSMS PG Committee. The Sub-Committee report was approved and ordered publicized in JMS-MS.
- The following committee reports were considered: (a) Insurance Studies Committee, meeting of August 13 (b) Advisory Committee to Michigan State Medical Assistants Society, meeting of September 10 (c) Meeting of Ubiquitous Hosts for 1953 Annual Session, September 10 (d) Awards Committee, September 20 (e) Rheumatic Fever Control Committee, meeting of September 9 (f) Conclusions of Study Committee on Basic Science Act (including minority opinion) (g) County Societies Committee, meeting of September 20 (h) Publications Committee meeting of September 20.
- At the post convention meeting of September 25, The Council tendered a rising welcome to the newly elected officers: R. H. Baker, M.D., Pontiac, President-Elect; J. E. Livesay, M.D., Flint, Speaker; K. H. Johnson, M.D., Lansing, Vice-Speaker; William M. LeFevre, M.D., Muskegon, Councilor of the 11th District; and B. T. Montgomery, M.D., Sault Ste. Marie, Councilor of the 12th District.
- Matters referred to The Council by the 1953 House of Delegates were given study and referred to the October 22 meeting of the Executive Committee of The Council, to consider in the light of the transcribed Proceedings (to be indexed on October 18).
- L. W. Hull, M.D., announced the appointment of members of 1953-54 MSMS Committees, which appointments were approved by The Council.
- Official thanks to all who helped to make the 1953 Annual Session an outstanding success (an all-time registration record for Grand Rapids was made with 3,266) were placed upon the minutes.

(Continued on Page 1152)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1150)

- **Ralph A. Johnson, M.D., Detroit**, President of the Wayne County Medical Society, reported on a plan to interest more activity for the Beaumont Memorial among Wayne County doctors of medicine. Dr. Johnson's letter and his suggestion to appoint a special committee, were approved.
- **Frank L. Rector, M.D.**, long-time Secretary of the MSMS Cancer Control Committee, presented his final report, prior to his retirement on September 30, 1953. A vote of thanks was placed on the minutes of The Council to Dr. Rector for "his untiring efforts in behalf of the cancer program of Michigan."
- Matters of mutual interest were discussed with the Michigan Health Commissioner, A. E. Heustis, M.D.
- A vote of thanks was placed on the minutes to Dr. and Mrs. William A. Hyland for their hospitality in opening their home for the Sunday, September 20, meetings of The Council.

WHAT THEY SAID ABOUT THE ANNUAL SESSION

This is the finest state medical exhibit that I have ever seen. . . . I was once more impressed with the excellence of your organization! . . . Your convention, of course, is in a class by itself. . . . A very excellent meeting—the show was worthy of a national convention. . . . Your kind hospitality and marvelous courtesy is outstanding. . . . You have a wonderful state; only wish we were able to stay longer. . . . MSMS is a fine organization. . . . It was a compliment and a thrill to meet your Society. . . . Meeting so many fine members of the medical profession was a deep pleasure. . . . Congratulations on a fine meeting. . . . There's so much work before, during and after a convention that does not appear to the eye—and is never fully appreciated. . . . We go to conventions to talk to M.D.'s and are sometimes disappointed because of lack of interest. Not so at your convention. Michigan is tops.

You put on a very fine scientific program—and your hospitality, we have never seen anything like it! . . . I thought the meeting was of high caliber; you have a better quality in your exhibits than one encounters in most of the State meetings. . . . I was only too happy to meet again many of my numerous friends from Michigan. I feel almost like a resident of Michigan myself. . . . We of the SAMA look to the State and county medical societies for leadership and guidance. . . . The meeting was one of the best state meetings I have ever attended, and the hospitality you extend to your guests puts the rest of us to shame. . . . I had no idea it was such a grand affair.

MEDICAL-LEGAL INSTITUTE DECEMBER 10-11

The Michigan State Bar Medical-Legal Institute conducted by the Law-Science Institute with the co-operation of the Michigan Law Institute will be held at the Sheraton-Cadillac Hotel, Detroit, on Thursday and Friday, December 10-11, 1953.

This extraordinary program is for the benefit of professional people (M.D.'s and Lawyers) concerned with personal injury claims. All members of the Michigan State Medical Society are cordially invited to attend.

Hubert Winston Smith, M.D., LL.B; Director of the Law-Science Institute of the University of Texas, will be the director of the Michigan Medical-Legal Institute.

The first session will be held Thursday, December 10 at 9:00 a. m.

Program Outline

Thursday Morning—December 10

Theme: Preparation and Trial of a Personal Injury Case by the Plaintiff.

The structure and Function of the Human Body.

Thursday Afternoon

1. Basic Scientific Principles of Traumatology.
2. Fundamental Knowledge Relevant to Traumatology of the Musculoskeletal System.
3. Fundamental Knowledge Relevant to Traumatology of the Nervous System.

Thursday Evening

- (1) Trial Sequence
- (2) Trial Provisions
- (3) Cash present

Trial Procedure and Medicolegal Trial Technique additional presentations by two outstanding visiting trial lawyers.

Friday Morning—December 11

Theme: Preparation and Trial of a Personal Injury Case by the Defendant.

Traumatology of the Musculoskeletal System.

Friday Afternoon

Traumatology of the Nervous System.

For program and complete details, write J. Adrian Rosenburg, Chairman, State Bar Committee on Medical Jurisprudence, Jackson City Bank Bldg., Jackson, or Milton E. Bachmann, State Bar Executive Secretary, Olds Tower, Lansing.

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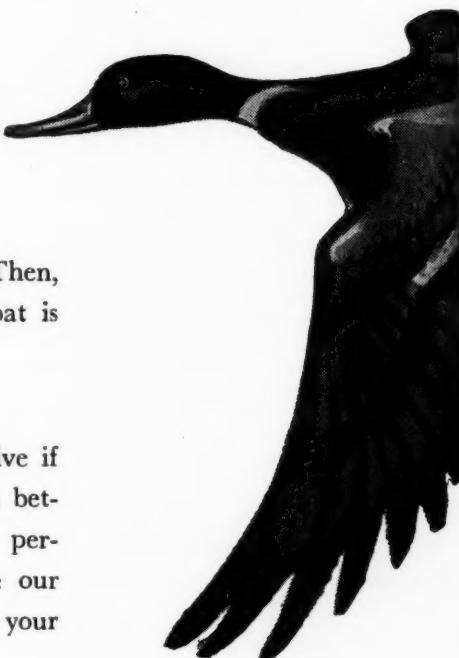
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Allegan County Wins Attendance Contest

At the record-breaking 1953 MSMS Annual Session, twelve component county medical societies were represented by 60 per cent or more of their membership!

Winner of the attendance contest was the Allegan County Medical Society, with nineteen of

its choice, from any part of the United States or Canada, for one of its meetings. The speaker's expenses will be assumed by MSMS, under rules of the contest announced in July by The Council.

Other county medical societies with outstanding attendance records at the Grand Rapids Annual

MSMS ATTENDANCE BY COUNTIES

County Medical Society	Total Membership	Number registered at Annual Session	Percentage of members registered
Alpena-Alcona-Presque Isle	25	3	12.0%
Allegan	23	19	82.6%
Barry	14	10	71.4%
Bay-Arenac-Iosco	77	24	31.1%
Berrien	81	14	17.3%
Branch	25	17	68.0%
Calhoun	129	39	30.2%
Cass	10	2	20.0%
Chippewa-Mackinac	26	3	11.5%
Clinton	18	12	66.6%
Delta-Schoolcraft	23	3	13.0%
Dickinson-Iron	22	4	18.2%
Eaton	19	14	73.7%
Genesee	223	67	30.0%
Gogebic	20	1	5.0%
Grand Traverse-Leelanau-Benzie	43	20	46.5%
Gratiot-Isabella-Clare	41	19	46.3%
Hillsdale	18	8	44.4%
Houghton-Baraga-Keweenaw	28	3	10.7%
Huron	15	3	20.0%
Ingham	199	100	50.3%
Ionia-Montcalm	40	24	60.0%
Jackson	111	39	35.1%
Kalamazoo	149	74	49.7%
Kent	320	245	76.6%
Lapeer	16	7	43.8%
Lenawee	42	8	19.0%
Livingston	17	3	17.6%
Macomb	50	14	28.0%
Manistee	13	7	53.8%
Marquette-Alger	40	1	2.5%
Mason	11	2	18.2%
Mecosta-Osceola-Lake	16	11	68.8%
Menominee	18	3	16.7%
Midland	28	11	39.3%
Monroe	33	6	18.2%
Muskegon	93	65	69.9%
Newaygo	8	6	75.0%
North Central Counties	21	6	28.6%
Northern Michigan	34	11	32.4%
Oakland	233	38	16.3%
Oceana	11	5	45.5%
Ottawa	47	34	72.3%
Saginaw	135	38	28.1%
Sanilac	12	2	16.7%
St. Clair	62	7	11.3%
St. Joseph	23	12	52.2%
Shiawassee	27	7	25.9%
Tuscola	19	8	42.1%
Van Buren	24	16	66.6%
Washtenaw	312	44	14.1%
Wayne	2302	259	11.3%
Wexford	14	5	35.7%

its twenty-three members signing in at the registration desk for a "batting average" of 82.6 per cent. For this accomplishment, the Allegan Society will gain a bonus in the form of a guest speaker

Session were: Kent, 76.6 per cent; Newaygo, 75; Eaton, 73.7; Ottawa, 72.3; Barry, 71.4; Muskegon, 69.9; Mecosta-Osceola-Lake, 68.8; Branch, 68; Van Buren, 66.6; Clinton, 66.6, and Ingham, 60.

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You and the Michigan Business Receipts Tax

The new Michigan Business Receipts Tax as it applies to doctors of medicine and other professional men is relatively simple. The tax is computed at the rate of 4 mills per \$1.00 or \$4.00 per \$1,000 of adjusted receipts. The term "adjusted receipts" means the gross receipts of the taxpayer less certain allowable deductions or 50 per cent, whichever is greater.

In the case of doctors of medicine, the allowable deductions would be rent, cost of drugs and instruments purchased (except capital investments such as x-ray machines, et cetera), heat, light, water and numerous other similar expenses. Salaries paid are not deductible.

Therefore, in the majority of cases the doctor will find it to his advantage to use the minimum deduction of 50 per cent of his gross receipts. After making the deduction, each taxpayer is allowed an exemption of the first \$10,000 of adjusted receipts.

Here's How

To illustrate, let us assume that the doctor has gross receipts of \$30,000. His deductions for rent, heat, lights, etc., do not equal 50 per cent of his gross receipts, therefore, he uses the minimum deduction of 50 per cent or \$15,000, leaving him with a taxable income of \$15,000. From this amount he is entitled to deduct as his annual exemption his first \$10,000 of adjusted receipts. This amount deducted from the \$15,000, leaves a net taxable remainder of \$5,000 against which the tax rate is applied with the net tax due for the year of \$20.00. From the above example it

is plain that until the gross receipts of a taxpayer exceed \$20,000 there would be no tax due.

File Quarterly Reports

The statute requires the filing of quarterly returns which are to be filed on or before the last day of the month following the close of each quarter. The return which is filed at the end of the year is called the annual return. The quarterly returns may be estimated and any adjustments made at the time of the filing of the annual, verified return.

In the case of a taxpayer who is in partnership with others, the partnership is considered to be the taxpayer rather than the individual partners, and regardless of the number of co-partners, there is only one \$10,000 deduction for the co-partnership.

Detailed information as to specific problems may be obtained by writing the Michigan Department of Revenue, 200 Tussing Building, Lansing.

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The N.N.R. monograph on Furadantin states:

66 Nitrofurantoin.—Furadantin (Eaton).—

Actions and Uses.—Nitrofurantoin, a nitrofuran derivative, exhibits a wide spectrum of antibacterial activity against both gram-positive and gram-negative micro-organisms. It is bacteriostatic and may be bactericidal to the majority of strains of *Escherichia coli*, *Micrococcus (Staphylococcus) pyogenes albus* and *aureus*, *Streptococcus pyogenes*, *Aerobacter aerogenes*, and *Paracolobactrum* species. The drug is less effective against *Proteus vulgaris*, *Pseudomonas aeruginosa*, *Alcaligenes faecalis*, and *Corynebacterium* species; many strains of these organisms may be resistant to it. However, bacterial resistance to other anti-infective agents is not usually accompanied by increase in resistance of the organisms to nitrofurantoin. The drug does not inhibit fungi or viruses.

Nitrofurantoin is useful by oral administration for the treatment of bacterial infections of the urinary tract and is indicated in pyelonephritis, pyelitis, and cystitis caused by bacteria sensitive to the drug. It is not intended to replace surgery when mechanical obstruction or stasis is present. Following oral administration, approximately 40% is excreted unchanged in the urine. The remainder is apparently catabolized by various body tissues into inactive, brownish compounds that may tint the urine. Only negligible amounts of the drug are recovered from the feces. Urinary excretion is sufficiently rapid to require administration of the drug at four to six hour intervals to maintain antibacterial concentration. The low oral dosage necessary to maintain an effective urinary concentration is not associated with detectable blood levels. The high solubility of nitrofurantoin, even in acid urine, and the low dosage required diminish the likelihood of crystalluria.

Nitrofurantoin has a low toxicity. With oral administration it occasionally produces nausea and emesis; however, these reactions may be obviated by slight reduction in dosage. An occasional case of sensitization has been noted, consisting of a diffuse erythematous maculopapular eruption of the skin. This has been readily controlled by discontinuing administration of the drug. Animal studies, using large doses administered over a prolonged period, have revealed a decrease in the maturation of spermatozoa, but this effect is reversible following discontinuance of the drug. Until more is known concerning its long-term effects, blood cell studies should be made during therapy. Frequent or prolonged treatment is not advised until the drug has received more widespread study. It is otherwise contraindicated in the presence of anuria, oliguria, or severe renal damage.

Dosage.—Nitrofurantoin is administered orally in an average total daily dosage of 5 to 8 mg. per kilogram (2.2 to 3.6 mg. per pound) of body weight. One-fourth of this amount is administered four times daily—with each meal and with food at bedtime to prevent or minimize nausea. For refractory infections such as *Proteus* and *Pseudomonas* species, total daily dosage may be increased to a maximum of 10 mg. per kilogram (4.5 mg. per pound) of body weight. If nausea is severe, the dosage may be reduced. Medication should be continued for at least three days after sterility of the urine is achieved.



Cancer Comment

LOCAL HEALTH DEPARTMENTS AND CANCER CONTROL

Understanding the cancer problem and measures for its control are not difficult matters to the person of average intelligence. There are a few facts that must be understood in order to motivate the layman to take appropriate action when action is necessary. Details of diagnosis and treatment are matters for medical opinion and decision. Laymen should know *when* to take action and *what* this action should be. Everyone should know that:

1. Every cancer and suspected cancer patient demands immediate diagnostic and treatment attention. Delay is always dangerous and may be fatal.
2. The periodic medical examination by the family physician in the absence of signs or symptoms is the best protection against the development of cancer to the incurable stage.

The place of the local medical society in a cancer control program has been adequately discussed in the pamphlet, "Role of the Cancer Committee of the County Medical Society in Cancer Control," recently published by the Cancer Control Committee, Michigan State Medical Society, and placed in the hands of the county medical society officers. Health department personnel should join forces with the medical profession in directing local cancer education programs. These two organizations should take the lead in supplying the scientific information for the benefit of their community. Such leadership calls for co-operation, not competition.

Among the many things the local health department can do in the cancer education field are the following, not listed necessarily in the order of their greatest importance, nor are all possibilities for education and service mentioned.

1. Local health department personnel should co-operate with local physicians and hospitals in diagnosis, treatment and care of cancer patients.
2. Public health nurses often can assist in tumor clinics and in followup observations on cancer patients who have been under treatment.
3. Nurses can assist in solving economic problems that may arise with cancer patients.
4. Educational activities, such as "cancer teaching days," for local medical, dental and nursing professions should be supported.
5. All recognized educational media should be utilized to spread knowledge of cancer and measures for its control to all population groups of high school age and over.
6. Teachers, especially science teachers in high schools and colleges within the health department's jurisdiction, should be instructed in the fundamentals of a cancer control program and aided in developing methods and content of classroom instruction in this subject.

7. Interest of high school students can be intensified by supplying them with information for poster and essay writing contests on cancer subjects.

8. The placing of authoritative books and pamphlets on cancer in public and school libraries should be encouraged and listing of publications on cancer from questionable sources should be discouraged.

9. Newspapers and radio broadcasting stations should be supplied with suitable material on cancer containing as much local color as possible.

10. Health department personnel, when conducting health examinations among school and community groups, should always keep the possibilities of cancer in mind, and know, as far as possible, that its presence has not been overlooked or misinterpreted.

11. Where cancer is known or strongly suspected, health personnel should exhaust all proper measures to get that patient under competent medical supervision. Many such patients will be encountered in routine contacts with the public.

12. While the annual number of cancer deaths in a local area is too small for statistical study, unless the area includes a large city, the fullest possible use should be made of such records to further understand the local cancer problem and to emphasize the need for more education, the finding of early cases, and their adequate treatment.

13. In co-operation with local physicians and hospitals, a registry should be established for all cancer patients residing in the local health jurisdiction. In time, such a registry will greatly increase knowledge of the incidence and prevalence of cancer, accurate knowledge of which is practically nonexistent at the present time.

14. Co-operate with all lay organizations in worthwhile cancer education and control programs.

15. By being informed about cancer and in keeping with their duties and responsibilities to render a constructive health service, public health personnel can and should become the balance wheel or "governor" to control unwise activities of over-enthusiastic or self-seeking interests in prosecution of the cancer program in their communities.

In addition to the projects listed, any interested local health department personnel can find many other constructive activities in the local cancer control field.

Cancer of the breast rarely occurs in women whose ovaries have been removed surgically at some previous time.

* * *

Cancer of the prostate gland has never been reported in a eunuch.

* * *

Cancer occurring in pregnancy, when hormone manufacture is abnormal and at a high level, has a notoriously bad prognosis.

* * *

When cancer occurs in or is transplanted to experimental animals, the morphology of the endocrine glands is seriously changed.

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Newer Concepts Concerning Tuberculosis During Childhood

By Milton I. Levine, M.D.
New York, New York

IN DISCUSSING the subject of tuberculosis during childhood it is extremely important that, at the very outset, there be a clear understanding of the difference between primary tuberculosis and reinfection tuberculosis. This understanding is necessary in any discussion of pathology, treatment and prognosis.

Primary tuberculosis is the form the disease takes when tubercle bacilli become implanted on body tissue not yet sensitized to tuberculin. Hemogenous tuberculosis such as miliary tuberculosis, tuberculous meningitis, tuberculous joints, spine, kidney, et cetera, are usually complications of primary tuberculosis.

Reinfection tuberculosis, which is usually much more severe than uncomplicated primary tuberculosis, occurs when tubercle bacilli become active on tissue already allergic to tuberculin, differs greatly in pathology, in treatment and also in prognosis. It is almost as if one were dealing with an entirely unrelated disease.

It shall be the purpose of this paper to limit the discussion to primary tuberculosis and its complications since, with few exceptions, this is the type of the disease observed in children.

The mortality curve from tuberculosis during the various years of childhood is well known to all

From the New York Hospital—Cornell Medical Center, Department of Pediatrics.

Presented at the Eighty-Seventh Annual Session, Michigan State Medical Society, Detroit, September 25, 1952.

NOVEMBER, 1953

pediatricians—an abrupt rise to a peak during the first two years of life, then an abrupt decline with a very low level between the ages of three years and thirteen years, and then the rise which occurs during puberty.

It is of interest to note that of all the factors involved in primary tuberculosis the most important in prognosis is the age of the child. A child with a primary pulmonary tuberculosis under twelve months of age, unless treated with our modern antibiotics, has only about a 50 per cent chance of surviving the disease, whereas a child of five years of age with the same tuberculous pulmonary pathology has better than a 95 per cent chance of survival.^{6,7}

The physician presented with a child with primary tuberculosis is confronted with a number of important questions.

1. Should the child be given bed rest or permitted to remain ambulatory?
2. If a child with primary tuberculosis is hospitalized should contagion precautions be observed?
3. Should antibiotic therapy be used in uncomplicated primary tuberculosis?
4. At our present stage of knowledge what therapy is most advisable for miliary tuberculosis, tuberculous meningitis and tuberculous adenitis?

Sufficient evidence has been gathered in the United States to indicate that uncomplicated primary tuberculosis runs its course regardless of whether or not a child receives bed rest. In our own studies of cases followed through the Department of Health in New York City, children were placed in bed only during febrile periods which occurred at the onset. Once the fever had subsided they were permitted activity without restriction, even attending school. There was no evidence, statistically or otherwise to indicate that

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this unrestricted activity had any harmful effect. The lesions cleared just as quickly and there were no more complications than were found among controls.¹¹ This is in complete agreement with the findings of Dr. Jay Arthur Myers at the Lymanhurst Clinic in Minneapolis.¹²

However, it must be stated that Dr. Arvid Wallgren of Sweden has expressed disagreement with this plan of treatment.¹³ He maintains his patients at bed rest until the sedimentation time has subsided, and places some limitation on their activity for the following year.¹⁴ Wallgren claims that ambulation leads to complications. It may be that this is true in Europe, for there is every reason to believe that there is some difference in bodily reaction to tuberculosis on the Continent. Among the frequent complications of primary tuberculosis in Europe are erythema nodosum and pleural effusion. Erythema nodosum is almost never seen associated with tuberculosis in this country, and tuberculous pleural effusions are rare in children.

However, occasionally there are children with primary tuberculosis who are hospitalized—and the question always arises as to what precautions should be taken. Just how contagious are these children? At the present time there are many hospitals that will not accept on their wards a child with a diagnosis of tuberculosis for fear of extra problems that might arise, such as special precautions, added nurses and nursing techniques.

It should be stated, based on numerous studies, that uncomplicated primary tuberculosis is not contagious—and no need exists for special precautions. No tubercle bacilli enter the bronchial tree from the area of pulmonary infiltration. What few organisms may be found in the gastric washings enter the trachea through perforations of the caseous lymph nodes adjacent to the bronchial tree or trachea. But the organisms discovered are so few that they are very rarely seen on smear, being only obtained by culture or animal inoculation. The New York Tuberculosis and Health Association has just prepared a statement to the effect that primary tuberculosis, unless complicated, is not to be considered as contagious. This fact has been confirmed by Dr. Arvid Wallgren.

Several further questions arise concerning the primary phase of tuberculosis.

Is there any indication for the use of antibiotics in the treatment of this condition?

Here again we must turn back to the mortality chart and observe the two periods of relative

susceptibility: the first three years of life where the tuberculosis mortality rate is very high, and the following nine years (up to twelve years of age) when the body is highly resistant and the tuberculosis mortality is extremely low.

Now any disease with a mortality of 50 per cent during the first year of life deserves heroic treatment. During the years from 1946 to 1952 when streptomycin was the only really potent anti-tuberculous agent available, the question of its use in treating primary tuberculosis of infancy arose frequently.

As a rule such treatment was withheld for the tendency of the tubercle bacilli to develop a resistance had to be considered—and if such resistance was developed in the course of a simple primary—there would be no drug to fall back on if there were a hematogenous spread of streptomycin resistant organisms resulting in miliary tuberculosis or tuberculous meningitis.

Today we are treating a number of primary tuberculosis cases with isonicotinic acid hydrazide. The infant may be treated at home since the medication is given by mouth with practically no side-effects. The dosage given is 5 to 8 mg. per kilogram, and the infant is followed frequently with x-rays and physical examinations. So far in the few cases we have followed there has been no hematogenous spread. Should one occur, streptomycin could then be added in the treatment.

It is interesting to note that, as far as we can judge, at the present time, there is no increased speed of disappearance of the primary tuberculous pulmonary infiltration when under treatment of streptomycin or isonicotinic acid hydrazide. In many cases where a miliary spread is a complication of a pulmonary primary, the lungs clear completely of the miliary lesions under antibiotic therapy but the original primary pulmonary infiltration remains.

There would not appear to be any great need for antibiotic treatment of uncomplicated primary tuberculosis in children between the ages of three and twelve years for these children will usually recover completely without complications.

In cases of miliary tuberculosis, tuberculous meningitis, and progressive primaries the use of these newer drugs is certainly indicated.

The term progressive primary is often misunderstood. It may be explained as a primary infiltration which, instead of subsiding down and leaving a calcified Ghon's primary lesion, progresses, cas-

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eates, and finally cavitates. Such a tuberculous cavity in a child's lung should be treated exactly as a tuberculous cavity in an adult's lung.

Although experience at the moment is limited it would seem advisable in these severe complications of primary tuberculosis to use both streptomycin and isonicotinic acid hydrazide concurrently.

Probably 8 mg. per kilogram daily of isonicotinic acid hydrazide divided into two or three doses is the optimum treatment.

As far as we know at the present time there are no harmful effects from use of isonicotinic acid hydrazide. The symptoms most noted during its usage, none of which is of any importance, are hyper-reflexia, vertigo which may appear during the early weeks of treatment but which gradually subsides completely, constipation, which also may occur during the early weeks but which also disappears, and once in a while urinary bladder retention which is also temporary.

A good deal has also been written recently about built-up resistance of the tubercle bacilli to isonicotinic acid hydrazide. This has been demonstrated on culture media and also from tests of tubercle bacilli from the bodies of treated patients.

However, I have been informed by Dr. Walsh McDermott who has had a good deal of experience with this drug, that resistant tubercle bacilli can be found in the sputum of patients who have never had any contact with the drug. In his opinion these tests are of very little, if any, significance in determining the efficacy of isonicotinic acid hydrazide—and it is of greatest importance to note that in the studies of Solikoff and Robitzek at Sea View Hospital in New York; in the studies of McDermott and Tomsett on the American Indians, and in the studies of Dr. Edith Lincoln at Bellevue Hospital in New York, there have been no relapses¹³—an occurrence which was met only too frequently in treatment with streptomycin.

The question also frequently arises concerning the possible use of streptomycin or isonicotinic acid hydrazide in cases of tuberculous adenitis. Most frequently the subject is brought up in relation to tuberculous cervical adenitis, but occasionally it relates to an enlargement of hilar nodes which are occluding a bronchus and causing an atelectasis.

There has been no evidence that caseous nodes respond to any of the antibiotics.

Tuberculous cervical adenitis may be treated

successfully in several ways by the use of streptomycin. In a number of cases the nodes have been removed surgically after preparation by a daily dose of 1 gm. streptomycin for two weeks, and followed by 1 gm. daily for two more weeks. This method may also be used with isonicotinic acid hydrazide. The results using the latter drug should theoretically be as favorable as those obtained with streptomycin, but adequate experience is as yet lacking.

We have not, in our clinic, seen any favorable results on treating cold abscesses by the use of isonicotinic acid hydrazide. In one case we have had a child with a draining cervical node on this drug for six months without any noticeable improvement. We are now referring this child for surgical excision of the node.

We have used one other method successfully in the treatment of tuberculous cervical adenitis. The children were treated with streptomycin 0.5 gm. three times a week until the node became fluctuant. Then a large needle (16 gauge) was inserted through the skin about one inch from the node and directed into the node. The contents of the node were withdrawn, and leaving the needle in place, 1 gm. of streptomycin in solution was inserted. This was repeated every week until fluctuation no longer existed—a condition usually lasting only two or three weeks. If this treatment is successful, no necrosis of the skin takes place and no scar follows.

The situation is considerably more complicated in relation to enlarged hilar nodes which are either causing an atelectasis of long duration or an obstructive emphysema which may result in considerable dyspnea. If removal of the node is considered of importance it is probably best removed through the chest wall. There have been cases in the past where such obstructive nodes were removed by bronchoscopic surgery—but today with newer techniques the excision can be more safely performed by thoracic surgeons.

Considerable question has arisen within the past year concerning the use of tuberculin, streptodornase and streptokinase in the treatment of tuberculous meningitis. Their use lies in the digestion of fibrin. As you know, streptokinase and streptodornase are used in tuberculous empyemas and in the treatment of hemothorax. Dr. Renee Dubos has pointed out that in cases of tuberculous meningitis where the spinal fluid contains very few

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tubercle bacilli, there is a marked increase in the number of tubercle bacilli following the intrathecal injection of tuberculin.⁸ This would seem to indicate that the fibrin masses holding the tubercle bacilli have resolved freeing the organisms.

However, in practice severe reactions occur with all three of these agents when such treatment have been attempted on children with tuberculous meningitis. At the present time such use is contraindicated unless a block occurs in the spinal canal.

I might add with respect to intrathecal tuberculin therapy in tuberculous meningitis that Cairns and Smith of Oxford reporting favorably on its use stated that ten of thirteen patients (treated with tuberculin and streptomycin) who initially were in coma or delirium, were alive twelve months after treatment.

In New York, New York, Dr. Edith Lincoln used PPD intrathecally on seven patients. Of these only one survived. Of course, the cases chosen were severe with signs of spinal block, where the mortality would be unusually high.¹³

Children who develop caseous pneumonic tuberculosis whether as the result of a progressive primary, or a reinfection tuberculosis, should be treated very much like adults with the same condition. Thin-walled cavities may respond to streptomycin and isonicotinic acid hydrazide. Thick-walled cavities should be treated either with pneumothorax or surgical excision of the infected lobe or area. Fortunately, the lung tissue of a child is much more elastic than that of an adult, and when a portion of the lung is removed, the remaining lung tissue expands and fills the thoracic space without difficulty.

Thoracoplasty in the young child is contraindicated for as the body grows the chest distortion becomes very pronounced, and may even cause cardiac difficulty in later years.

The prophylaxis against tuberculosis still centers largely around the use of BCG. As is generally known this vaccine has been given to over 60,000,000 persons throughout the world, largely through the efforts of the World Health Organization. In certain countries its use is obligatory.

In 1950, the U. S. Public Health Service licensed the Research Foundation of the University of Illinois for the manufacture, exportation, importation, and sale of BCG. However, Dr. Robert Anderson and Dr. Carol Palmer stated that it was the most unstable vaccine so licensed in the United States,

and recommended that until more stable immunization agents were perfected its use be limited to those persons who were particularly vulnerable to the disease—such as physicians, nurses, medical students, et cetera.^{1,2}

But although BCG has been used on human beings since 1922 a great many facts concerning it are still unknown.

To date no adequate means of stabilizing the potency of the vaccine has been perfected. No means has been developed to assure that similar amounts of BCG from different laboratories would have equal numbers of viable organisms and equal potency.

It should be understood that BCG is a vaccine of living attenuated bovine tubercle bacilli and its effectiveness depends on the number of viable organisms in the solution. The first difficulty to overcome is the rapid loss of viable organisms in the prepared vaccine. Dr. Renee Dubos of the Rockefeller Institute found that there is a loss of 90 per cent of the viable organisms within the first twenty-four hours if the vaccine is not kept under constant refrigeration. Similar findings were reported by Aronson, Schneider and Jensen.^{8,10}

Attempts have been made to stabilize the vaccine by lyophilization, but 90 per cent of the viable organisms die in the course of the process.^{3,4,5} However, the living BCG organisms that remain may live for more than a year if maintained at a temperature of 2 to 4 degrees centigrade.

More recent experiments have demonstrated that BCG cultures grown in Tween 80-albumin medium maintain their viability for at least four months whether at room temperature or on refrigeration.⁹

But the rapid loss of viability is the lesser of the two major problems confronting the investigator. More complicated is the marked variation in the potency of the same amount of vaccine from different laboratories.

According to Dubos and Suter¹⁴, if a specified amount of living BCG organisms from three different laboratories is inoculated into the skin of guinea pigs, there is found to be a specific difference between each vaccine in the size of the local lesion and the persistence of the lesion. Reactions from intraperitoneal inoculations are also specific for each type of vaccine.

In further studies at the Rockefeller Institute, Dr. Werner Scheffer used BCG vaccine from four

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different sources—Phipps Institute, Tice Institute, the New York State Department of Health, and the World Health Organization BCG Center at Copenhagen. He found that the local lesions caused by the individual vaccines differed markedly, even when the same number of living bacilli were inoculated. As a matter of fact a given number of living BCG organisms from one laboratory produced routinely a local lesion twenty-seven times as large as a local lesion produced by exactly the same number of viable bacilli from another laboratory.¹³

However, a great deal of evidence has been accumulating to indicate that BCG vaccine is capable of conferring a partial immunity on those inoculated, but a degree of immunity far below that attained by the use of diphtheria or tetanus toxoid or through smallpox vaccination. The exact degree of immunity received through BCG and the deviation of the immunity are at present unknown and probably variable. Most workers have assumed that the immunity is maintained as long as the skin retains its post-vaccination tuberculin reaction.

But in spite of this partial knowledge concerning BCG vaccine, it is being widely used throughout the world.

Why then has its use not been adopted as a public health measure in the United States? The answer is that in the United States antituberculosis measures such as case-detection, separation of contacts, hospitalization, mass x-ray studies, removal of tuberculin-positive cows, and pasteurization of milk have attained a high degree of success.

As an example one might take the city of New York with its crowded living quarters, with a negro population of over 540,000 as well as a large Porto-Rican population. In 1915, there were 1,200 deaths from tuberculosis among children under the age of fifteen years (eighty-one per 100,000). In 1948, the tuberculosis deaths among this age group had dropped to seventy-four (four per 100,000). A fall of over 95 per cent—and this all occurred during a period when only the usual antituberculosis methods were being used. This was just before the general use of streptomycin. These figures are superior to any published from countries and localities claiming benefit due to BCG inoculation. In the United States as a whole the tuberculosis mortality has dropped from 202 per 100,000 in 1900, to only 22.2 per 100,000 in

1950. I believe in Michigan it is seventeen per 100,000.

However, the use of BCG is indicated as a public health measure in countries or localities where antituberculosis measures are difficult to carry out, in spite of the fact that as a vaccine it is far from perfect.

Before leaving the subject of BCG, it should be emphasized that this vaccine is entirely safe, and there is no general reaction following its use, such as fever or pain.

If it is to be used in its present form it would seem to me that its greatest benefit would be in adolescents and young adults in environments where they might be exposed to tuberculosis.

There is reason to believe that in a fair number of adolescents and young adults a primary tuberculosis pulmonary lesion, instead of subsiding and ending in a calcified Ghon's lesion, may become progressive, caseate in its center and cavitate—in other words become a progressive primary case of tuberculosis.

In giving BCG the point of inoculation, whether it be in the upper arm or thigh, serves as the primary focus—and there will be no primary tuberculosis pulmonary infiltration.

This has been, of course, a brief summary of certain subjects relative to tuberculosis in childhood. There is still a great deal to be learned, especially as regards the prophylaxis and treatment of this disease.

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(Continued on Page 1234)

Anesthesia Accidents

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SPACE does not permit a detailed account of each accident that has occurred in connection with the administration of an anesthetic. I will attempt, however, to discuss in a general way certain categories of accidents and some of the conditions which tend to produce these accidents.

One of the most important considerations before administration of anesthetic agents is started is identification of the agents by actual reading of the labels on the containers and verification of the substance therein. If a gas machine which has been used the night before is to be used in the morning, the anesthetist must make sure that the material in the ether bottle is identified as ether. I have seen a situation in which the ether bottle had chloroform in it and this was not recognized by the person who was administering it until the patient stopped breathing. No untoward result occurred, but it was only because of the skill of the administrator who quickly realized by the patient's reaction that he was not giving ether.

The use of various gases has been associated with unfortunate results in instances in which a cylinder containing a different gas than the one to be used has been installed in a yoke and has been administered; for example, two anesthetic gases have been administered simultaneously when it was intended that only one gas should be administered with oxygen. Fortunately, a solution of this problem has been accepted by the manufacturers of compressed gas, The American Society of Anesthesiologists and all others concerned. The plan is to use a pin-index safety system so that only the proper cylinder can be attached in a given yoke. It is planned that all gas machines will be equipped with this device in 1953.

Another preanesthetic effort is directed at the elimination of static electricity with the hope of eliminating fire and explosion hazards. The National Fire Protection Association set up standards in the past, some of which were im-

practical, and considerable revision was made in 1944. Conductive flooring is now mandatory in operating rooms as are explosion-proof switches. Other rules have been established with regard to roentgen-ray viewboxes, and so forth. The recommended safety measures are good if they are used properly, but the fallacy in the regulations lies in the fact that they give the impression that safety can be purchased. For example, at considerable expense conductive flooring may be installed, but if the persons in the room wear rubber-soled shoes, the conductive flooring can do no good because they have insulated themselves from the floor. Yet each person may feel safe because he knows the flooring is conductive.

The same institution might have explosion-proof connections and switches, but if an extension cord is added to an electrical connection and is connected and disconnected during the operation, the benefit of the explosion-proof connections is void. The people who work in the room need to have some information about these things. If the floor is conductive, the machines and persons must be grounded to the floor. This requires a drag chain for the equipment and leather-soled shoes that are slightly damp for personnel. Also, if ordinary terrazzo flooring has been installed, it is helpful to have it mopped with water that has a little salt in it, because this makes it more conductive.

A relative humidity of 50 per cent or more in the operating room helps in the battle against static electricity. Although humidity in the operating room is desirable, it is not in itself particularly effective in preventing static sparks and therefore it is not a wholly reliable factor. In the operating rooms the proper type of carbon dioxide fire extinguisher for use on fires caused by ether, alcohol and other inflammable materials should be readily available. Containers for inflammable materials such as ether, alcohol and various antisepsics should be removed from the room when not in use unless they are nonbreakable containers made of metal or plastic. A glass bottle containing ether or alcohol may become a real hazard in the operating room. In the excitement of a small fire, someone may inadvertently knock over and break glass containers causing a flash fire; this happens too frequently.

It is essential, therefore, that each person in the operating room be fully informed on how to conduct himself to avoid fire and explosion regardless of whether safety measures have been im-

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stalled, and if fire and explosion occur in the operating room, each person must know that he must keep away from sources of ignition such as materials that will burn or explode.

These accidents that can happen during the administration of inflammable anesthetics demand the serious attention of those who deal with such situations, and it is only by strict attention to the avoidance of such hazards that we can hope to reduce the incidence of accidents with anesthetics.

It would be of little value for me to relate incidents of accidents which have occurred without offering constructive suggestions on how to avoid accidents. Once the anesthetic has been chosen, the posture of the patient should be considered. Sometimes the upright position, with the patient's head elevated, or even the sitting position means that the anesthetist must guard against certain untoward results that may be associated with the patient's position while a general anesthetic is being administered. Generally speaking, the untoward results include a marked fall in blood pressure, shock, and some degree of anoxia. One of the conditions probably most often associated with cardiac arrest is a degree of anoxia to which the heart will not adapt itself. The anesthetist must be prepared to change the patient's position, to ventilate the patient well with oxygen and to support the blood pressure. The ability to change the operative position rather quickly must be planned so that nothing will interfere with its accomplishment.

The use of an endotracheal tube in the upper respiratory passage provides a good airway and tends to take care of pulmonary ventilation either naturally or artificially. One of the accidents that can occur if the patient is in the sitting position and the endotracheal tube is either too long or for some reason gets pushed down into the trachea so that the tip of the tube lies beyond the bifurcation of the trachea, is a bizarre type of respiration and probably some cyanosis with some effect on pulse and blood pressure. All of these conditions will be relieved quickly if the endotracheal tube is withdrawn an inch or two as a test to make certain that it has not dropped down too far in the trachea.

If the blood pressure has fallen, blood or fluids must be administered. The early preparation for this effort means that a large bore 15-gauge needle with a stilet should be introduced into a vein while the patient is in good condition and the

veins are well filled, and the most ideal time is just as soon as surgical anesthesia has been established and before the operation starts. Many physicians wish to start the flow of fluid at the beginning of the operation. We now have available blood of proper group and Rh which can be cross-matched before operation so that all that needs to be done is to connect the dripper to the bottle, fill the tubing, withdraw the stilet from the needle and connect the tubing to the needle. If the state of shock is advanced the veins will not accept cold blood rapidly because of venospasm. It is interesting to know that after 100 or 200 cc. of fluids or blood has been administered, the rate of flow may suddenly increase considerably without any adjustment having been made to the device. This usually indicates a decrease in spasm associated with a definite rise in blood pressure and is a good sign.

Plasma is being used less and less because of the hazard of virus hepatitis. A solution of 5 per cent dextrose in water is used commonly; isotonic sodium chloride solution is seldom used but plasma volume expanders, such as dextran, polyvinyl pyrrolidone and gelatin, are being used more and more and are effective.

A recent hazard has been discovered in anesthetizing patients who have long been treated with cortisone or ACTH (adrenocorticotrophic hormone) and then have been taken off treatment with these hormones. If these patients are anesthetized and operated on, they may go into sudden, fatal shock any time during the operation or during the first day after operation.

Such a large number of conditions are being treated with cortisone or ACTH that from now on this hazard must be recognized, and when the patient is being questioned, probably the next question after he has been asked if he has artificial teeth might well be "Have you ever been treated with cortisone or ACTH?" Usually he will know because the material has been relatively expensive.

It is advisable to have at hand 50 cc. bottles of adrenocortical extract, cortisone or hydrocortisone (100 mg. in 500 cc. of saline solution) to be given intravenously. Adequate protection may be afforded, if the patient is given 200 mg. of cortisone intramuscularly for two days before the operation, on the day of operation and for one or two days after operation with gradual reduction of doses to the maintenance level. It is possible that in the future the anesthetized patient in a state of

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shock who does not respond to ordinary treatment may be helped by intravenous injections of hydrocortisone or adrenocortical extract or some new substance yet to be discovered regardless of whether shock is associated with previous treatment with cortisone or ACTH.^{1,2,3,4}

A type of balanced anesthesia is now being used which is relatively free from the hazard of fire and explosion; namely, pentothal sodium and curare administered intravenously plus nitrous oxide and oxygen (50 per cent each) by inhalation. Patients are more safely and easily handled if an endotracheal tube has been inserted. The possibility that laryngospasm will occur at the time of intubation is considerable, but spraying the throat with a 10 per cent solution of cocaine or some other surface anesthetic agent will help greatly. If obstruction occurs and tracheotomy is being considered, it may be desirable to insert a 13-gauge needle into the trachea from the outside before tracheotomy is done.

Pentothal sodium as well as curare is a respiratory depressant, and if these drugs are given rapidly cessation of diaphragmatic motion will occur. This should be avoided. If it happens, however, artificial respiration must be started by means of a gas machine and alternate pressure on the breathing bag to inflate the lung with oxygen. The effects of curare may be neutralized by administration of tensilon, which has aided greatly in the control of such a situation. The use of tensilon has become important in electroshock therapy for patients who are mentally ill. Curare is given to prevent fracture of bones; pentothal sodium is given so that the patient does not undergo the unpleasantness of the treatment, and tensilon is administered to neutralize the effect of curare because of the shortness of the treatment.

If a patient has been given a dose of morphine and morphine poisoning occurs either because the dose of morphine was large or because the patient does not tolerate morphine, then nalline (N-allyl-normorphine hydrochloride) may be used to neutralize the effect of the morphine. Unless morphine was given, however, the nalline alone

will produce a morphine-like effect. Occasionally spasm of the sphincter of Oddi, also known as "postcholecystectomy syndrome," will develop after morphine has been given in the bedroom and the patient has been brought to the operating room, extreme pain may develop in the abdomen to the consternation of everyone present. If the pain is due to spasm of the sphincter of Oddi, an intravenous injection of 0.2 gm. of sodium nitrite will give relief in less than a minute and the surgeon may proceed with the operation.

One of the terrible tragedies that can occur in so far as the anesthetist is concerned is putting the patient to sleep without properly identifying him. This must be guarded against constantly.

One means of avoiding anesthesia and post-operative tragedies is the use of the postanesthesia observation room (P.A.R.) where the patient is sent after operation and where he remains until he is able to answer questions, obey orders and do some things for himself. Such rooms have been available in some hospitals since 1942 and the service in them has been increased and expedited. Many have excellent facilities such as suction devices, needles, syringes, all the equipment for placing endotracheal tubes and for administering blood plasma volume expanders, fluids and stimulants, and all the things that might be needed occasionally and that cannot be available in every bedroom in the hospital. The economic value of such a room is great since it reduces the number of nurses required to care for surgical patients.

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Psychiatry for the General Practitioner

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IT IS my firm belief and conclusion after years of study and practical observation that one-quarter of the cost of medical care could be eliminated by a better understanding of psychotherapy and its utilization by the medical profession. That alone should suffice to justify greater interest in psychiatry as well as the intangible benefits that accrue to patients through help in meeting emotional problems. We can also help balance the budget and reduce income taxes.

Every doctor practices psychiatry whether he is aware or not—some good, some bad, and some indifferent. It has now become a must for all physicians to improve their psychotherapeutic technique.

You can do pretty good psychiatry without a great deal of technical knowledge. You may not have good insight into what is called projection, identification, compensation or transference, but, if you are sincere, thoroughly honorable, kind and sympathetic and do not try to do too much, you will do more good psychiatry than a highly book-trained diplomate. You will give security—that's what so many of your anxiety patients need sorely. Follow this by reassurance and you will have helped a lot. There is where the good old family physician was more help to the community than the highly hospital-trained psychiatrist.

Until recently the training of medical students has been inadequate in the recognition of psychosomatic, personality and character disorders in patients; all of whom some time or another go to the physician for the relief of some vague symptoms which the hospital-trained physician can't explain by the usual routine test. The gulf between the young graduate's equipment and the old family doctor's horse sense and experience is pretty wide. The more recent recognition of the general practitioner is commended as no one is in a more key position.

You perhaps are one of those physicians who does not like to be bothered with nervous cases. Whether or not you like it, it is your duty to do something for them.

The need for psychiatric treatment in the office

of the general practitioner (who sees 90 per cent of the cases first) is very, very important. You can help many patients more with a knowledge of emotions than with a stethoscope. The early treatment of every disorder has long been recognized as of the greatest value. The cost of care for the mentally ill has rapidly and steadily been rising to enormous proportions. The 60 million dollars that was recently voted in Michigan in a bond issue will soon have to be augmented. The stone, mortar and tiled halls will never solve the problem. The understanding of mental health needs must be at the onset.

The importance of every word and thought expressed by the physician in the presence of the patient is very important. Grover Cleveland once said that every word a president utters weighs a ton. A chance remark or phrase by the physician who is dealing with the patient who is nervous, tense and stressful often produces marked pathology. The patient with the tachycardia of functional origin, who is told time after time to come back in a week to have another check made, is soon incapacitated.

Even among the doctors of medicine and to a greater extent among the laity there is a lack of knowledge in the differentiation between a psychiatrist, a psychoanalyst and a psychologist. The psychiatrist is a doctor of medicine who has been well-trained by specific and regulated education and experience to treat the affective and organic disorders that result in symptoms of mental illness. The psychoanalyst has the same basic college training, but having, himself, been psychoanalyzed confines his therapy to the interpretation and treatment as originally promulgated by Sigmund Freud. The psychologist is not a doctor of medicine but has had special training regarding normal and abnormal behaviors. There is considerable discussion as to his right to administer psychotherapy.

The Council of the American Psychiatric Association has gone on record with the statement that "the practice of psychotherapy is a province of medical practice." The responsibility in the field of health lies with the physician.

A gross classification places mental illness in either the organic field or the field of affective disorders. The organic cases are more easily recognized by the general practitioner than the affective disorders, but are much less frequently met with in practice. This paper will deal largely with affective disorders. However, there is usually a psy-

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chic component in every organic condition regardless of its location or type. For example, the woman with the lump in the breast must not be dismissed with the mere statement—we will take it out and you will be all right. She can easily develop many psychosomatic complaints and even a positive neurosis that can be avoided if the surgeon will take the time to consider and treat the person in the body, as well as the body. He can be a therapist of the emotions as well as an individual who cuts and sews.

In a brief, all-inclusive paper of this type, the material has to be made up largely of *Do's* and *Don'ts*. First, be absolutely certain of the absence of physical pathology. Nearly every symptom that can arise from physical pathology can be imitated almost identically by a psychiatric complaint. Hearing and vision disturbances of purely psychogenic origin are common. Hoarseness may be a neoplasm of the throat or an attention-seeking device. Gas, distress after eating are not necessarily signs of early malignancy but may be signs of unrequited love or other highly emotional factors. Low pelvic pain is frequently psychogenic and it may be very difficult to differentiate organic pathology from wishful thinking.

We find in spite of the above facts some doctors of medicine still are prejudiced against psychiatry. Some of this prejudice may lie in the physician himself. To be of psychiatric help, the physician must have an interest in people greater than his interest in wealth. The physician resorts to long laborious examinations and x-rays. Sometimes a minor organic disorder is made to carry the burden of the symptomatology and this is used as an escape for the physician who is reluctant to concern himself with the patient's emotional factors. Such things as dizziness, enuresis, frigidity, and impotence are passed off as something the patient will outgrow or he should buck up and forget it.

It behooves every doctor of medicine to make himself fully aware of psychiatric knowledge, yet the few who practice psychiatry and the rejection of psychiatry by a large number of their colleagues is pathetic. While the best minds in the profession accept psychiatry, there still remains an enormous number of doctors of medicine who only turn to psychiatry as a last resort.

An explanation of the attitude taken by our colleagues is that psychotherapy is not well understood. Colleges have not taught it. The college

should teach as much about emotions as it does about drugs and bugs.

Again a word of warning. Organic pathology may be present. Only after the most painstaking examinations should one classify the patient as one needing psychiatric care only. But, if you cannot find an organic basis for the symptomatology, it should be considered malpractice if psychiatric therapy is not given. For generations, the public has been taught to depend upon drugs, surgery and manual therapy for the relief of human ills. Most patients have to be educated to the fact that they can have certain physical symptoms without known organic basis. Some patients just don't have the intelligence quotient to grasp it, but the majority, if one takes the time, will co-operate and receive benefit.

Such simple illustrations as grief brings tears without anything being wrong with the eyes; the lips get dry under tension; one does not feel like eating, if unhappy; and the old expression "he gives me a pain in the neck" will help the patient to understand his psychosomatic complaints. Above all, never ridicule a patient for symptoms that the laity often term as imagination. To tell the patient to go home and forget it is too common an expression, but a source of a great deal of revenue to the cultists. If there were nothing wrong with the patient, he would not be in your office.

In a practice such as we have in this day and age made up of different nationalities, sects, faiths and religious backgrounds, it behooves us to be cautious that we do not traumatize the patient or initiate new conflicts by statements or references in conflict with their particular faith or sect. This necessitates a little extra study on the part of the physician to learn something of the principles of the major groups. The patient's philosophy of life for his particular belief may be offended by the physician's lack of knowledge of his basic religious or racial training. For example, the Seventh Day Adventists, the Quakers, the Menonnites, the Catholics, the Vegetarians, must not be traumatized by orders or recommendations inconsistent with their fundamental faiths.

The patient does not readily accept the diagnosis that his complaints are due to something other than of a physical origin. He wants something he can tell his business associates that is acceptable. A woman does not like to tell her bridge club that her headache is due to her husband's infidelity. The golf player would rather explain a "missed

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putt" on his arthritis than with his last encounter with the income tax man.

Every psychiatrist's files are full of patients who have gone for years from one doctor to another with their symptoms due to emotional maladjustments and frustrations, not recognized as such. On the other hand, patients often leave the psychiatrist's office and go where they can get a "shot" for undulant fever or a "shot" of an estrogenic substance for the "change!" Always remember that a person is sick or else he would not be in your office.

The physician's responsibility does not stop with the area of his specialty. Patients' emotional burdens are heaped on top of their physical ills—great or small. Successful treatment is impossible without recognition of this fact. Psychiatry cannot accomplish the impossible. "You cannot make a silk purse out of a sow's ear." You cannot improve conditions, but you can prevent progression and develop understanding.

Many of the problems that confront the doctor of medicine in general practice have very little relationship to the psychoses. I am referring here to Personality Pattern Disturbances. For example, inadequate personalities. They are not physically or mentally grossly deficient on examination, but they do show inadaptability, ineptness, poor judgment, lack of physical and emotional stamina and social incompatibility. There is not so much you can do with this group, but the real physician will make an attempt, at least, to help them in their dilemmas. Another personality trait disturbance is the emotionally unstable personality. He needs help in his poorly controlled hostility, guilt and anxiety reactions. To him, the good old family physician becomes the father type person and he needs a chance to talk to the doctor just as much, if not more, than some placebo pills. There are numerous personality disturbances and disorders that come into the physician's office that can be prevented from developing into severe character disorders or even so-called nervous breakdowns by tact and judgment on the part of the physician.

One of the patients that gives the doctor the so-called pain in the neck (now you know what I mean by a symptom arising from a disagreeable situation) is the patient who comes in, flops down on the chair and says, "Doctor, I'm all in." You have known the patient for a long time and are sure there is nothing physically wrong. The usual practice which the doctor has learned from radio

advertising and other sources is to attribute it to a vitamin deficiency or "change of life." Manufacturers have become rich and not a few doctors have been able to take trips to Florida by the unwarranted use of vitamins and estrogenic therapy. When you are positive that there is no organic pathology, then try to recognize that feelings of fatigue and exhaustion can be due to the emotional "burning-up" resulting from frustrations, selfishness, disappointments or an inability to keep up with "The Joneses." Skillfully try to help the patient understand the probable cause—the "dynamic mechanism"—of his or her symptoms. Stimulate satisfaction in his everyday existence. Assure him that his physical condition is improved by reasonable activity, not forgetting, however, that fatigue often is the early symptom for tuberculosis, diabetes, anemia, brucellosis or some actual physical condition.

One of the most difficult nervous patients you have to treat is the one whose basic personality pattern makes for a poor adjustment reaction to life. The ones who can't take it—the ones extremely selfish—often the overprotected child in early life—they are very clever. They will simulate any symptom in order to get attention. If they cannot attain this by psychosomatic complaints, they will complain of mood-swings, they will complain of melancholia, and these are often very difficult to differentiate from true depressive states. However, their thought of futility and fixed patterns are helpful in the diagnosis of the true melancholia.

As general practitioners, you are frequently consulted as to the behavior of children. There has been a big change from the former philosophy—"children should be seen and not heard," "spare the rod and spoil the child" era to the present philosophy of the progressive schools. Whether or not one agrees fully with the present day concept of child training or feels that the pendulum has swung too far, nevertheless it is a physician's duty to make himself aware of good answers for the mother whose child will not eat his spinach or develop toilet habits as the mother wishes. Their behavior is often attention-seeking devices. Children love attention (as well as adults) and their behavior often is diagnosed as pure cussedness, which can be cured by proper attention. Some adults who come to your office are still children. They have grown older physically, but haven't grown up and matured emotionally. The too dif-

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ficult problems should be referred to a mature child psychiatrist. The parents are not always to blame. Grandparents and siblings are dreadful hurdles to the young child and schoolmates are cruel. I believe that physical punishment has its place in discipline. When justly applied by a person who loves and respects the child and teaches that punishment should naturally follow misdeed, that we must learn to be responsible for the consequences of our acts, punishment is of value.

Very little will be said in this paper about sex. The author is inclined to think of sex deviations and sex maladjustments as being the results rather than the primary causes of illness. In other words, we have in the past had the cart before the horse and now we should consider the basic and fundamental disorders that lead to sex deviations. Don't tell your patient that he or she would be better, if he or she got married. Don't tell the immature young man that a house of prostitution will cure him.

Many patients who come into your office are filled with anxiety and feelings of fear. They complain of many different physical symptoms. Those with fear predominating are classed as suffering from a Phobic Syndrome. They have psychosomatic complaints that are due to feelings of insecurity because for the past twenty years we have been fed on a political poison emphasizing insecurity.

One of the most important sources of insecurity with its train of physical symptoms in the present day person is his lack of faith and religion. The human being needs faith and a deity. He must be able to depend upon some power greater than himself.

There are many subjects of interest to the general practitioner that time does not permit us to discuss. There is the problem of Court cases, of the mentally deficient child, of the epileptic, of the relatives of the mentally ill, and of the preparation of your patient before referring him to a psychiatrist.

In cases that have to be referred to the psychiatrist, the regular physician can do much to densitize the patient to what before World War I was considered more or less of a stigma—to visit a psychiatrist. Someone once gave a definition of psychiatry as: "Psychiatry is largely concerned with

well individuals who are trying to meet successfully the stress, strains, tension and fears of everyday living." This is very helpful to the patient and does much towards establishing a good rapport between the patient and the psychiatrist. The psychiatrist, himself, can do much towards establishing a good rapport by his own attitude of being a physician rather than a mystical soothsayer.

The general practitioner has a serious problem in trying to anticipate which of his obstetrical cases is liable to develop what used to be called a post-partum psychosis. It is doubtful if anyone can anticipate all of these cases, but one can be more aware of certain types of personalities that are liable to break under stress and strain. There is a very, very limited number of these that fall in the category of toxic psychoses. A great many of them never become frankly psychotic, but the pregnancy and the care of the newborn often produces a train of unpleasant symptoms.

Another problem is the patient who comes to your office and later becomes a coroner's case by reason of self-destruction. Nothing is more frustrating or disconcerting to a physician than to have seen a patient several times and a little while later hear of a "rope in the attic" episode or "bridge accident." These patients are characterized by outstanding depression of mood, mental and motor retardation, perplexity, uneasiness and apprehension—they especially have ideas of futility, fear of poverty, and unforgivable feelings of guilt and even may admit there is nothing to live for. This is the patient that needs hospitalization and today can be treated very successfully. In general, after you have satisfied yourself of negative physical findings, think of the patient as a human individual, the product of his constitutional endowment and environment, who has his hopes and his fears, his worries and his problems, his wishes and his frustrations, his faith and his disbeliefs, his failures and his successes, and the physician can and should be able to help these.

In conclusion, if I have done anything to give you a better understanding of problems that have bothered you and if I have stimulated you to a greater total interest in the person who calls upon you as well as the body of that person, I shall have the feeling of having accomplished something worthwhile.

Methostan in the Treatment of Nutritional Dwarfism

Preliminary Report

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THE ANABOLIC effect of methylandrostenediol was used to good advantage in seven cases of nutritional dwarfism and an additional case of dwarfism from other causes. Stimulation of growth occurred in children who had been of less than average height and weight before treatment.

Nutritional dwarfism is perhaps the most subtle type of dwarfism encountered by the general practitioner. Children so dwarfed usually have good body proportions and are not deformed. However, they fall below normal in stature and weight. Their bodies, particularly the genitalia, are underdeveloped and they have poor muscle tone. Irritability, nervousness, and emotional instability are commonly found.

The first seven children treated with methylandrostenediol who are reported here were dwarfed from nutritional inadequacies. They came from homes with moderate incomes. There had been no serious disease or infection prior to treatment. As the appended tables show, most of them had been seen as infants. Their treatment with methylandrostenediol began when they were three or four years old. In all cases, x-rays of the wrist showed a delay in skeletal development. *Case 8* was not one of nutritional dwarfism and will be considered separately.

Methylandrostenediol was chosen for use in treatment because of its anabolic effects which are similar to those of testosterone and methyltestosterone. In contrast to them, however, it is unlikely to cause andromimetic effects.^{1,2,3,4,5,7,8,9,10,11} An increase in weight may accompany the use of this steroid.^{1,2,9,10} It has been reported effective for weight gain, increase in height, and stimulation of bone matrix formation.¹

Methylandrostenediol was used in tablet form as Methostan.* The initial daily dosage usually was one-half tablet, 12.5 mg. However, no rigid dosage schedule was formulated as the dosage was ad-

justed according to the individual response. Each child returned one month after the first administration of the drug for evaluation of its effects. If only slight gains were apparent, the daily dosage was increased to three-fourths of a tablet, or approximately 18 mg. Sometimes the dosage was increased to one tablet, 25 mg., daily because it was desired to obtain the maximum growth possible prior to close of the epiphyses. Fusion of the epiphyses, it should be noted, was not an effect of the drug. The dosage of Methostan was purposely maintained at a low level because it was desired to stimulate growth processes. The drug usually was administered for two to four months and then stopped to determine if growth would continue unaided. From the experience gained, it is deemed wise to continue the drug until normal levels of weight and height are reached. Thereafter examination at three-month intervals for a year is advisable to assure that growth is progressing steadily.

The androgen, methyltestosterone, has been found to increase the growth rate in both poorly and well nourished dwarfs, notably by Talbot and his co-workers.⁶ Accordingly, this substance was first administered to *Case 1* because she had been smaller than normal at birth and her weight and height had not reached the average for her age in the succeeding two years. Weight gain and increase in stature were achieved during the four months the patient received 10 mg. daily. However, methyltestosterone had to be discontinued because of the development of hirsutism and enlargement of the clitoris.

Methostan replaced the former drug after a rest period of two and a half months. The response to 12.5 mg. daily of Methostan in this patient illustrates that encountered in others. The child began to gain weight and her height increased. Irritability ceased rather dramatically, the youngster becoming happy and co-operative. Appetite improved markedly as did sleeping habits. Upon cessation of medication after two and a half months to determine whether the rate of growth could be maintained, body weight decreased and the patient reverted to her previous irritability and ate and slept poorly. Readministration after two months of the same dosage of Methostan again reversed all this.

Parents of the children receiving Methostan cooperated well as they could readily see results early in the treatment cycle. Children who had

*Manufactured by Schering Corporation, Bloomfield, New Jersey.

METHOSTAN IN NUTRITIONAL DWARFISM—HEWES

Case 1.—R. P., a girl, born October 1, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 13						
— 3	10 4	22 1/8	15 1/4	14 1/4	"Unhappy," eating and sleeping well, normal bowel movements		
1	17 10	27 1/4	17	16 1/2	Extremely irri- table, poor appetite		
1 6	20	29 1/8	18 1/2	17 3/4	"		
2 3	22 13	32 1/8	19	18	Irritable, poor appetite, difficult sleeping habits, restlessness during sleeping periods		
2 7	22 13	33 1/8	19	19		Methyl- testosterone 10 mg.	
2 8	24 2	33 1/8	19	19		"	
2 9	25 7	34 1/2			Improved emotional status with loss of irritability, im- proved sleeping habits	"	Hirsutism
3 1	28 2	36 1/4				Discontinued	Hirsutism, enlarged clitoris
3 3 1/2	28 8	36 1/4			Irritability, loss of appetite, rest- lessness at night	Methostan 12.5 mg.	None
3 4 1/2	29 11	37 1/4	19 1/8	19 1/4	Markedly im- proved appetite, happy, co-operative	"	None
3 7	30 10	38	19 1/8	19 1/8		Discontinued	
3 9	29 9	38 1/2	19 1/2	19 1/2	Poor appetite, whiny, irritable; poor sleep	Methostan 12.5 mg.	None
3 11	32 1	39 1/8	19 1/2	19 1/2	Sleeping well, appetite good, happy; contented	"	None

presented problems in school, needed disciplining at home, and caused trouble in group play showed remarkable personality changes under treatment. The growth problem assumed secondary importance until these changes were wrought but thereafter the parents became interested in growth and were pleased with the increments obtained.

In *Case 2*, Methostan stimulated weight and height increases not obtainable with a controlled diet and supportive vitamin therapy. Small gains in *Case 3* twice made it necessary to increase the

dosage of Methostan to obtain a satisfactory rate of growth. The medication was administered nine months in all with a notable absence of hirsutism, voice changes, and masculinization. Treatment in *Case 4* began at age seven. With a high caloric, high protein diet and 18 mg. Methostan daily, this boy made good gains in weight and height. Treatment with Methostan was terminated in December, 1952, to see if satisfactory progress could be maintained without it.

No response to a high caloric diet, vitamins, and

METHOSTAN IN NUTRITIONAL DWARFISM—HEWES

Case 2.—C. S., a girl, born November 24, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 7	?					
5 wks	7 13	20	14 1/4	13 1/2	Excessively large anterior fontanel		
— 4	11 13	23 5/8	16	16 1/4			
1 —	17 3	28 3/8	17 1/4	17 3/4			
Examined at prolonged intervals					Poor appetite, emotional instability, irritability, restlessness at night	Vitamins, dietary control	
3 7	29 5	38 1/2	19 7/8	18 3/4	Irritable, uncooperative, constipation	Methostan 12.5 mg.	None
3 11	30 4	39 5/8	20	19 1/2	Co-operative, marked improvement in appetite and sleep, greater emotional stability, no constipation	"	"

Case 3.—C. W., a girl, born December 21, 1947.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	6 1						
4 2	29 11	39 5/8	18 1/4	19 3/4	Poorly nourished, irritable, wheezing, uncomfortable, unhappy child. Poor development.	Methostan, 12.5 mg.	None
4 3	31 2	39 5/8	18 1/2	20 1/2	Improved appetite; increased sense of well-being	"	"
4 4	32 3	40	18 1/2	21	Sleeping well. No irritability, agreeable, happy. Appetite still improving.	"	"
4 6	32 12	40 3/4	18 3/4	21 1/4	Appetite and sleeping habits good.	Methostan, 18 mg. dosage increased because of small gain	None
4 8	32 12	40 3/4	18 3/4	21 3/4	"	Methostan 25 mg.	"
4 10	33 14	41	19 1/2	22	"	"	"
4 11	34 8	41 1/8	19 3/4	21 3/4		Discontinued	

iron had been apparent in the sixth child for a year prior to treatment with Methostan. Upon receiving the drug, he improved and started eating a well balanced diet and drinking milk. There

was marked improvement in his well-being. He enjoyed playing outdoors, which he had not enjoyed before. He became co-operative both at home and on his visits to the office.

METHOSTAN IN NUTRITIONAL DWARFISM—HEWES

Case 4.—J. R., a boy, born March 13, 1945.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	6 3				Good condition		
2 6	25 12	33 $\frac{1}{2}$	19	19 $\frac{1}{2}$	Poor appetite, sleeping well, bowel habits regular, irritable, unco-operative		
Examined at intervals for minor upper respiratory infections							
5 4	37 5	41 $\frac{1}{4}$	19 $\frac{1}{8}$	22 $\frac{1}{4}$	"		
7	42 6	43 $\frac{1}{2}$	20	23 $\frac{1}{2}$	Undernourished, poor appetite, good sleeping and bowel habits, irritable, wrang- ling in school, generally under- developed stature	Methostan 12.5 mg.	None
7 1	40 13 $\frac{1}{2}$	43 $\frac{1}{2}$	20 $\frac{1}{8}$	23 $\frac{1}{2}$	Improved appetite, and temperament, better relation- ships in school	Methostan 18 mg. High calorie, high protein diet	"
7 3	42 5	43 $\frac{1}{2}$	20 $\frac{1}{8}$	23 $\frac{3}{4}$	Appetite increased, temperament improved, co- operative	"	None
7 4	43 4	44 $\frac{1}{8}$	20 $\frac{1}{8}$	23 $\frac{3}{4}$		Discontinued	
7 6	43 11	45 $\frac{1}{4}$	20 $\frac{1}{8}$	24 $\frac{1}{4}$	Irritable, unco- operative, dis- comfort in school, poorer appetite.	Methostan 18 mg.	None
7 7	44 13	46	20 $\frac{1}{8}$	24 $\frac{3}{4}$	Good appetite, no irritability, co-operative, well- balanced child	"	"
7 9	46 10	46 $\frac{1}{2}$	20 $\frac{1}{8}$	24 $\frac{1}{2}$		Discontinued	

The last patient, *Case 8*, is perhaps the most interesting of the group but this was not a case of nutritional dwarfism. This girl was first seen on August 30, 1950. Although she was sixteen years of age, her stature was that of a six-year-old child. Her previous treatment and condition at the time of examination are given in the table, *Case 8*. She had grown only one-half inch in the previous two years. In the first fifteen days of daily administration of 10 mg. methyltestosterone, a weight gain of 2 pounds 2 ounces and height increase of $\frac{3}{8}$ -inch occurred. The patient had been unco-operative and difficult to handle on the first visit, but her emotional status so improved under therapy that a close bond of friendship began to develop.

Some early fusion of epiphyses became apparent on x-ray examination after five months of treatment. The dosage of methyltestosterone was therefore increased to obtain all possible growth before complete fusion occurred. During the ensuing three months some slight increase in breast tissue, some growth of pubic hair, and slight enlargement of the clitoris became apparent. Voice changes also began to develop that necessitated discontinuance of methyltestosterone. The limit of treatment had been reached and any increase in the androgen would have given prohibitive virilization.

Without methyltestosterone, the patient's height at first increased slightly and then ceased to change. Her weight declined. Nervousness,

METHODAN IN NUTRITIONAL DWARFISM—HEWES

Case 5.—B. M., a boy, born June 4, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	3 5				2½ months premature		
— 10	14 2	24½	16½	17½	Poor condition, nutrition, and posture. Skin pale, clammy, warm. No teeth. Not sitting alone. Fontanel large anteriorly, protuberant abdomen, chronic respiratory infection. Appetite good but vomiting following ingestion of strained foods. Sleeping habits poor.		
— 11	17 5	25½	17¼	18¼	Reacting well to environment, sitting alone, three teeth erupted		
1 4	21	29½	18	19			
1 11	22 8	31½	18¼	19¾	Poor appetite, restless sleep		
3 10	29 4	36½	19	21	Irritable, restless sleep, poor appetite		
3 11	29 6	37	19	21	Poor appetite and sleep, bowel movement irregular, frequent upper respiratory infections	Methostan 12.5 mg.	
4 1	30 6	38½	19	21½	Marked improvement in appetite and temperament	Parents failed to administer Methostan in the succeeding month	
4 2	30 4	38½	19	21½		Methostan 12.5 mg.	None
4 4	31 6	38¾	18½	21¾		"	"
4 5	32 7	38¾	18¾	22		Methostan 18 mg.	"

irritability, and lack of co-operation returned. These symptoms disappeared under treatment with Methostan. After an initial fall in weight, she began to make a steady gain that continued throughout the reported period of observation. The dosage of Methostan was first increased to 18 mg. and later to 25 mg. despite nearly complete fusion of the long bones, apparent on x-ray, inasmuch as growth continued and it was desired to achieve the maximum possible. Methostan was continued for a year. At the end of that time, on December

17, 1952, the patient's weight was 65 pounds, her height 50½ inches. There had been no adverse effects from the medication.

Therapy with Progynon had been instituted when the patient was seventeen years old as it was desired to develop the secondary sex characteristics. Under this treatment the patient's voice softened, breast tissue increased, and female adipose deposits appeared. Regular seven-day menses had occurred during the three months preceding the last examination. The secondary

METHOSTAN IN NUTRITIONAL DWARFISM—HEWES

Case 6.—T. L. W., a boy, born October 12, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 10						
— 4	11 3	23 7/8	15 1/4	15 3/4	Poor appetite, repeated diarrhea, sleeping well, irritable, physical examination normal findings except for poor nutrition	High calorie diet with vitamins and iron	
— 6	12 1	25 3/8	15 5/8	15 3/4		"	
— 6 1/2	12 12	25 3/4	16	16		"	
1	15 14	28 1/2	17	17 1/4		"	
3 11	23 7	36	18 1/4	19 3/4	Poor appetite, good sleeping and bowel habits	Methostan 12.5 mg.	None
4	24 12	36 5/8	18 1/4	19 3/4		"	"
4 1	25 9	36 3/4	18 1/8	20 1/4	Eating well-balanced diet, marked improvement in well-being, enjoys outdoor play, co-operative	"	None

Case 7.—C. M., a girl, born March 26, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	7 6						
5 weeks	9 9	21 1/2	14 1/2	15	Colic, constipation, vomiting, restlessness		
— 6 1/2	15 4	26 1/2					
1 —	19 4 1/2	28 1/4					
4 —	28 11	37 3/8	19	20 3/4	Poor appetite and sleep, restless, irritable, uncooperative, no play with children	Methostan 12.5 mg.	None
4 1	28 13	38	19	21 1/4	Had bad chickenpox in preceding month	"	None
4 3	31 4	38 1/2			Appetite markedly increased, less irritable, playing well	Discontinued	
4 5	32 10 1/2	38 3/4			Appetite slackening, not as alert and happy as previously	Methostan 12.5 mg.	None
4 7	32 8	39 1/2				"	"
4 9	32 7	40 1/4	19 1/8	20 1/8		Discontinued	

METHODAN IN NUTRITIONAL DWARFISM—HEWES

Case 8.—A girl, born August 5, 1934.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	4 5						
1 —	12						
2-3						Thyroid	Excessive nervousness, increased pulse rate
7-14					Basal metabolism at 14, +23; 2 months later, normal	Thyroid 1 gr.	
16 (first seen)	52 10	47 $\frac{3}{4}$	19 $\frac{7}{8}$	24	Pulse 120, abdomen 20 $\frac{1}{4}$ ", good general condition, good nutrition, second- ary sex charac- teristics absent, emotional status poor, unco- operative	Methyl- testosterone 10 mg.	
16 1	54 12	48 $\frac{1}{8}$			Eating and sleeping well	"	
16 2	56 8	48 $\frac{3}{8}$				"	
16 3	57 12	48 $\frac{5}{8}$			Marked improve- ment in emotional status and co- operation		
16 5	58 11	48 $\frac{5}{8}$			X-rays of wrist showing early fusion	Methyl- testosterone 15 mg.	
16 6	59 10	48 $\frac{7}{8}$			Slight increase in breast tissue, some pubic hair and enlargement of clitoris	Methyl- testosterone 15 mg.	
16 8						Discontinued	Voice changes
16 9	64 6	49 $\frac{1}{4}$					
16 10	63 14	49 $\frac{3}{4}$					Voice changes persisting
17	63 14	50 $\frac{1}{2}$				Progynon 2 mg. 3 times weekly	
17 3	63 14	50 $\frac{1}{2}$			Nervous, irritable, unco-operative. Pulse 140. Appetite and physical condition good		
17 4	62 3	50 $\frac{1}{2}$			BMR—14, pulse, 120	Progynon 2 mg. 3 times weekly, Methodan 12.5 mg.	
17 5	Decreased	50 $\frac{1}{2}$			Co-operative. Feeling well.	Progynon 2 mg. 3 times weekly Methodan 18 mg.	

METHODAN IN NUTRITIONAL DWARFISM—HEWES

Case 8.—(Continued)

17	6	61	14	50%	19½	26	X-rays of wrist showing nearly complete fusion	"
17	9	64	9	50%			Female adipose deposits, increased breast tissue	Progynon 2 mg. 3 times weekly, Methodan 25 mg.
17	11	63	2	50%	19½	25½		"
18	1	65	8	51	19½	26½		"
18	4	65		50%	19½	27	Seven-day menses for past 3 months, secondary sex characteristics developing, voice softened, no enlargement of clitoris	Progynon-B 1 mg. three times weekly during first half of cycle. Methodan discontinued

sex characteristics continue to develop on a dosage of 1 mg. Progynon-B intermuscularly three times weekly during the first half of the menstrual cycle. This patient is far from normal in physique and secondary sex characteristics but the case illustrates what can and should be accomplished with a drug like Methodan. It also points up the fact that it should be administered prior to fusion of the epiphyses. Almost certainly, this child's height and weight could have been brought within normal limits had she been seen at an earlier age.

Summary

In seven cases of nutritional dwarfism, Methodan through its anabolic effect stimulated growth, the children gaining in weight and height. Their emotional status improved, sometimes dramatically. One additional dwarf whose nutrition had been adequate, increased in stature and gained weight when treated with Methodan. This patient was not seen early enough before the beginning of fusion of the epiphyses to achieve normal stature. Had she been, it is thought Methodan might have stimulated growth to normal size.

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146 East Maumee Street

Hyperthyroidism

The Rationale of Modern Treatment

By Carl W. Eberbach, M.D.

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THE HIGH incidence of goiter in the Great Lakes goiter belt has been greatly reduced during the past twenty years, due undoubtedly to the increased iodine content of our food and salt. The work of Marine and Kimball⁶ during the early part of this century led the way to our progress in the

of hyperthyroidism and its treatment has been revived and greatly stimulated.

With three available methods of treatment for thyroid disease, all of which are now well established as sound and effective procedures, it seems wise to look into their mode of attack in order that the proper therapy may be intelligently selected in a given case.

At the outset, it is important to appreciate that the ultimate cause of hyperthyroidism is not known. We do know, however, that the anterior pituitary gland, through its thyroid stimulating hormone thyrotropin, is capable of producing the symptoms of hyperthyroidism as:

THYROID-PITUITARY RELATIONSHIP

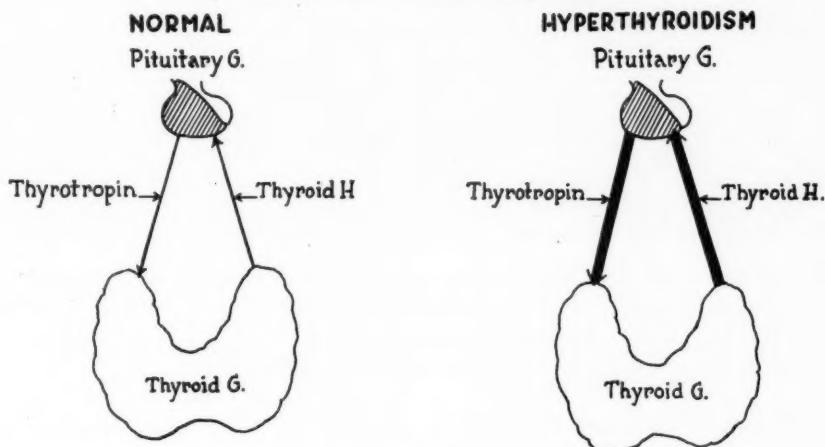


Fig. 1.

control of thyroid disease. Hyperthyroidism has likewise decreased proportionately. In my experience and that of my associates, 1,743 patients were treated surgically for hyperthyroidism during the period 1920 to 1930; 1,331 from 1930 to 1940, while only 884 were operated upon during the past decade, 1940 to 1950, for the same disease. However, hyperthyroidism is still sufficiently common to warrant our constant interest and research.

Since the important contributions to the treatment of hyperthyroidism in 1923 by Plummer,⁸ management of toxic goiter has followed until recently, rather clearly defined procedures. The accepted and highly successful therapy consisted in iodinization of the patient and subtotal resection of the thyroid gland. With the introduction of antithyroid substances by Astwood¹ nine years ago and radio-active iodine isotopes by Hertz, Roberts and Evans⁵ in 1938, interest in the etiology

1. Hypertrophy and hyperplasia of the thyroid.
2. Loss of colloid.
3. Elevation of basal metabolic rate.
4. Disturbances of carbohydrate metabolism.
5. Disturbances in calcium and protein balance.
6. Signs and symptoms of hyperthyroidism.

These essentially are the findings in hyperthyroidism. It appears, therefore, that the pituitary or a pituitary stimulating organ as the hypothalamus is primarily responsible for the disease (Fig. 1).

Heinbecker⁴ recently showed that the glandular hypophysis can be changed through altered activity of the hypothalamic nuclei which control the secretion of the neural hypophysis. This affords a basis for a concept of the pathogenesis of hyperthyroidism.

While it is important to keep in mind the possible basic causes for hyperthyroidism, we have

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been unsuccessful in dealing with them through any effective therapeutic measure yet devised. We are still compelled to control the disease by inhibiting the thyroid effect. This has been achieved by the three methods named above.

the thyrotropic activity. Secondly, an important observation has been made by Wolff and Chaikoff¹⁰ working with isotopes in which they found that thyroid synthesis of inorganic iodine to thyroxin is inhibited when the amount of inorganic

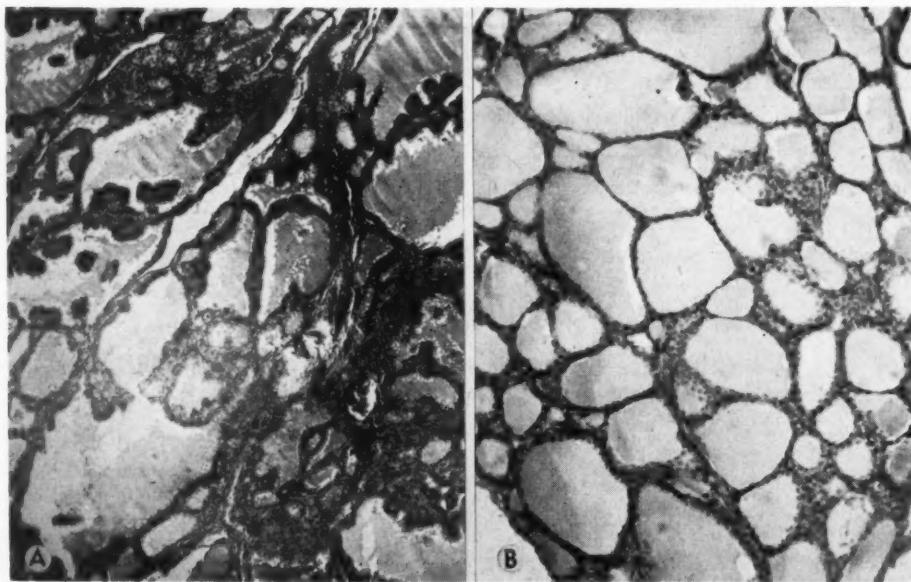


Fig. 2. Microphotographs of sections of the thyroid gland in diffuse toxic goiter (Grave's disease). Courtesy C. V. Weller, M.D., Chairman Department of Pathology, University of Michigan.
(A) Hypertrophy, hyperplasia and loss of colloid before treatment.
(B) Remission and involution after treatment with iodine.

Iodine.—Before Plummer introduced iodine as an important agent in preparing the toxic thyroid for surgical removal, thyroidectomy was a hazardous procedure, often carried out in many stages and resulting in an unduly high mortality. With the use of large doses of iodine in hyperthyroidism, involutionary changes in the affected gland promptly took place (Fig. 2). Exhausted acini became filled with colloid, and columnar or cuboidal follicular cells became flattened. Microscopically, the gland appeared not unlike the normal. With these changes, a typical clinical remission occurred as might be expected.

How then does the mere addition of excess iodine to the patient's intake bring this about? Here again the favorable reaction of the drug is not entirely clear. The following observations explain to a degree, however, what takes place (Fig. 3). First, iodine has a depressing effect upon the ability of the thyrotropic hormone to produce toxic goiter, which increases the involutionary effect on the hyperplastic gland. Experimentally, addition of free iodine to pituitary extract results in the loss of 90 to 100 per cent of

iodine in the serum exceeds 35 mcg per cent. This may explain in part the reduction of thyroid hormone secretion in the iodized patient with hyperthyroidism.

Because of these involuting effects of iodine on the toxic thyroid, it is not difficult to understand that thyroidectomy becomes a relatively safe procedure when the patient is well iodized. Add to these therapeutic measures the proper use of fluids, carbohydrates, oxygen and cardiac therapy, and the procedure carries a mortality of only about 1 per cent in all cases. Furthermore, if patients prepared for thyroidectomy with iodine alone are carefully selected and those in advanced stages of hyperthyroidism, or with severe complications, are dealt with by other available methods, the mortality is almost negligible.

Thyroidectomy with iodization, therefore, has in its favor (1) a rapid and safe method in dealing with hyperthyroidism; (2) excellent results in 90 per cent of cases; and (3) the additional advantages of thyroid removal in the event of carcinomatous change.

On the other hand, we have the disadvantages

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of (1) an irreversible process, and (2) an operative procedure which carries with it a low per cent of complications such as tetany, recurrent laryngeal nerve injuries and recurrence of toxic goiter in 2 per cent to 5 per cent of all cases. Re-

duced by Astwood, which is many times more effective and enjoys a low incidence of serious side reactions. Agranulocytosis does occur, but the incidence is probably less than 0.1 per cent.

In Europe, methythiouracil was introduced and

TEMPORARY EFFECT OF IODINE IN HYPERTHYROIDISM

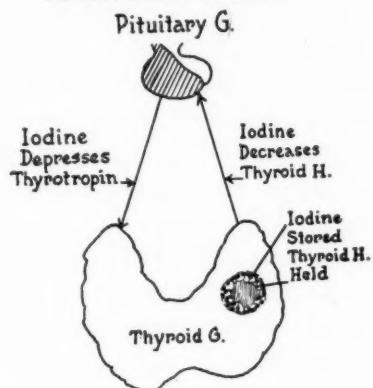


Fig. 3.

currence is considerably more common in diffuse toxic goiter than in toxic nodular goiter. Crile and McCullagh² believe that with careful follow-up, recurrence in the Grave's disease type of hyperthyroidism will be found to be about 15 per cent.

Antithyroid Drugs.—Most recent advances in the therapy of hyperthyroidism have been brought about through the use of thiouracils. To attempt to cure toxic goiter with goiterogenic substances is indeed paradoxical, though curiously enough very effective.

In 1943, Astwood and his associates put to clinical use the observations of the MacKenzies and MacCollum that certain sulphur containing goitrogens produced hyperplasia with diminution of the basal metabolic rate in animals. They noted further that the effect was neutralized by thyroxin and unaffected by iodine. It was thought, therefore, that hyperplasia resulted from increased pituitary activity due to the lack of the inhibiting effect of thyroxin.

Soon after the introduction of thiouracil as an antithyroid agent, it became recognized as a dangerous drug because of the high incidence of agranulocytosis which appeared suddenly and was entirely unpredictable. Fortunately after a study of a large number of compounds which possessed antithyroid activity, prophylthiouracil was intro-

THE ACTION OF THIOURACIL IN HYPERTHYROIDISM

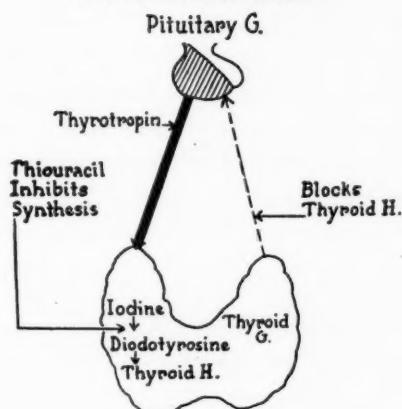


Fig. 4.

is now being used extensively in this country. Five years ago Stanley and Astwood³ introduced Tapazole (1-methyl-2-mercaptoimidazole) which is many times more effective than propylthiouracil. Favorable reports on its use are constantly appearing in the literature. Unfortunately these drugs do not strike at the basic etiological factor responsible for hyperthyroidism, but they constitute an important step forward in the control of the disease.

By means of radioactive iodine studies, their action has become rather clearly understood. It is now the generally accepted belief that thiouracil inhibits the synthesis of inorganic iodine into diiodotyrosine, and therefore prevents the formation of thyroxin as is indicated in Fig. 4. Normally by means of autoradiography and biochemical studies, the trapping and rapid concentration in the thyroid gland of inorganic radio-active iodine may be demonstrated. Immediate synthesis into organic thyroxin takes place, and within forty-eight hours 90 per cent of the collected inorganic iodine is stored as organic iodine. Excess inorganic iodine, which cannot be utilized after twenty-four hours, passes out of the gland into the general circulation. If, on the other hand synthesis is blocked with thiouracil, the trapping of inorganic iodine continues, but it enters and leaves the gland in a curve similar to that of the iodine content in the plasma. These observations indicate that thiouracil acts by blocking the synthesis of inorganic to

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organic iodine. Depending, therefore, upon the amount of stored organic iodine in the gland, a reduction in the available thyroid hormone takes place. The depressant effect of thyroid hormone on the pituitary is lost, and the production of thyrotropic hormone is increased, resulting in thyroid hyperplasia. If thiouracil is stopped, there again will be rapid uptake of iodine and involutionary processes take place.

With the reduction of the thyroid hormone which is responsible for the clinical picture in hyperthyroidism, the disease passes into a remission which may be controlled indefinitely by the drug.

Extensive reported experience with propylthiouracil permits the following conclusions to date:

1. The dosage varies from 300 to 600 mg daily depending upon the patient's response.
2. Agranulocytosis is rare but must be kept in mind.
3. Pre-treatment of the patient with iodine increases the amount of stored iodine and therefore delays the effect of the drug.
4. Toxic nodular goiters which contain considerable stored iodine do not respond as rapidly as diffuse toxic or Grave's disease types.
5. Forty to 50 per cent of permanent remissions may be expected after prolonged treatment, varying from six months to two years.

Under conservative treatment, the drug should be tapered off after the patient has become euthyroid rather than stopped abruptly. Recurrence is more likely otherwise. It is interesting that the remission rate is considerably higher in Grave's disease than in toxic nodular goiter as we recently point out by E. P. McCullagh.⁷

Propylthiouracil is ideal for surgical preparation as it converts most cases of toxic to nontoxic goiter. This has reduced surgical mortality in competent hands to about 0.1 per cent. It is desirable to discontinue the drug and iodinize the patient two weeks before the operation to restore the colloid in the gland, and reduce the friability and vascularity. Whether prolonged use of the drug will demonstrate any carcinogenic effect has not yet been determined, but it is doubtful.

The chief disadvantages in the use of propylthiouracil in the treatment of hyperthyroidism consist in the prolonged care which patients require and failure to reduce the size of large unsightly goiters, or those causing pressure symptoms. Furthermore about 10 per cent of patients

develop some type of side effects or intolerance for the drug. Finally, antithyroid substances do not remove the cause of the disease.

Radio-Active Isotopes.—Now we come to the most hopeful method of hyperplastic thyroid control yet devised, namely: radio-active iodine therapy.

As you know, radio-active iodine was introduced by Fermi in 1934. Four years later Hertz, Roberts and Evans,⁵ of Boston, and Hamilton and his co-workers³ in California published their findings in the study of thyroid physiology by means of tracer doses of radio-active iodine and autoradiographs.

This work disclosed certain important facts which have to do with isotope therapy. About 90 per cent of trapped iodine was found to be synthesized and held in organic form in the colloid; 10 per cent remained as inorganic iodine. Radio-active iodine appeared in the follicular cells within thirty minutes after administration, and in twenty-four hours none remained. It is thought, therefore, that the cells convert inorganic to organic forms which remain stored in the colloid. Furthermore, experience with I^{131} showed as might be expected, that the uptake of tracer I^{131} is much more rapid in hyperplastic goiters (75 to 95 per cent) than in the normal (65 per cent). In nodular toxic goiters, the uptake varies greatly, depending upon the degree of hyperthyroidism. In those nodules with hyperplasia, most of the tracer I^{131} will be found. This selective action is of great value in the treatment of toxic nodular goiters since the offending nodules are destroyed with relatively little damage to the normal gland.

We have, therefore, a new therapeutic agent which may be directed specifically against the hyperplastic thyroid without danger to other body tissues. At the present time I^{131} which is prepared by the Oak Ridge National Laboratories and released under certain controls, is used. Its half-life is only eight days, which means that at the end of thirty days, most of its radio activity is spent. The rays (largely Beta rays) penetrate tissue only 1 to 2 mm. and therefore are innocuous to surrounding tissues in the region of the thyroid gland where the highest concentration exists. Under treatment, hyperplastic portions of the gland are destroyed and reduced in size, and a remission of the symptoms occurs. Most glands with diffuse toxic goiter will be reduced to about normal size.

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but this is not true of the nodular type. Dosage varies from 3 to 17 mc. depending upon distribution of the hyperplasia. In diffuse hyperthyroidism of the Grave's disease type, response is rapid and smaller total doses are required than in the nodular types as might be anticipated. Repeated doses may be required in the nodular types.

The advantages in radio-iodine therapy are obvious. The method is simple and safe in qualified hands. There is no discomfort to the patient, and no complications involving the parathyroids or the recurrent laryngeal nerves. Myxedema in diffuse hyperthyroidism is no more frequent than after adequate surgery. In most cases of diffuse hyperthyroidism, the gland is reduced to normal size, resulting in a satisfactory cosmetic effect. To deliver by x-ray therapy, radiation equivalent to that of the isotope would cause severe damage to the skin and deep tissues of the neck, and would be less effective.

The disadvantages consist in the possible carcinogenic effect, which has not yet been determined. Therefore, I^{131} should be limited to older patients, and bad risk patients at any age.

In toxic nodular goiter, there is little reduction in size and the required dose of the isotope is larger than may be entirely safe. Furthermore, the possibility of a malignant nodule, though rare in toxic goiter, may be overlooked. Finally, the isotope is not safe in pregnancy after two months because of damage to the fetal thyroid.

In 1949, an Isotope Laboratory was established at Marquette University Medical School under the direction of Dr. Irving I. Cowan, Assistant Professor of Radiology. Since then 282 patients with hyperthyroidism were treated with excellent results in 90 per cent. These have been carefully followed to date, but there has not been sufficient time to accurately evaluate I^{131} as a therapeutic agent in this disease. As there is some divergence of opinion in the literature, I have concerned myself with thirty-six private patients, personally observed over a two-year period. Because of the remote danger of a carcinogenic effect, treatment was limited to recurrent hyperthyroidism in patients past fifty years of age, and to extremely bad risks of the Grave's disease type at any age in which the operative risk might well outweigh that of cancer. The youngest patient was twenty-two years old with severe diffuse hyperthyroidism (BMR plus 100) which failed to respond satisfactorily to antithyroid drugs and iodine over a

period of a year. The oldest, with recurrent hyperthyroidism, was sixty-eight years of age.

The basal metabolism varied from plus 20 to plus 100, with an average of about plus 45. The patients with low basal metabolic rate were selected because they were in the older age group with recurrent hyperthyroidism, and in some instances there was paralysis of one recurrent laryngeal nerve. All of the patients showed an uptake of tracer doses of I^{131} well above normal.

The dose varied from 3 mc. to 17 mc. Nearly half of the patients, and this included chiefly the recurrent group, were controlled with 3 to 7 mc. Eighty per cent were made euthyroid with doses of 10 mc. or less.

There were two clinical failures, though the basal metabolism rate and tracer doses indicated normal thyroid activity after treatment. Two other patients enjoyed only fair clinical results. The remaining patients, approximately 90 per cent, had excellent results.

In all cases, the basal metabolism rate had returned to normal and tracer doses of I^{131} confirmed these findings. On the basis of these tests, there were no hypothyroid glands, yet for several months after treatment many of the patients complained of tiring easily and showed fatigue on moderate exertion. Some complained of nervousness and emotional disturbances. There was occasional swelling of the feet and eyelids not due to associated cardiorenal disease. Small doses of thyroid gland brought about prompt improvement which seemed to indicate that there was subnormal thyroid activity. It is difficult to appraise the result of this group of patients accurately as there were many complicating diseases as hypertension, arteriosclerosis, cardiac disease, arthritis, diabetes, nervous instability, et cetera. Nevertheless the hyperthyroidism was completely controlled in all cases, and in 90 per cent, the clinical improvement was good.

Summary and Conclusion

A brief résumé of the three presently accepted methods of treatment for hyperthyroidism has been presented. It is important to look into their mode of attack and their limitations in order that the proper procedures may be intelligently selected in a given case.

Iodinization with subtotal thyroidectomy is a rapid and safe method of dealing with hyper-

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Intestinal Obstruction 1900 vs 1952

By Meyer O. Cantor, M.D., and
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THE MORTALITY rate of acute intestinal obstruction has been reduced from 50 per cent to approximately 15 per cent in the past fifty years. Many factors have been responsible for this. Among these is our better understanding of fluid

patients treated for acute small bowel obstruction at Grace Hospital between the years of 1945-1950 a marked improvement was noted. The over-all mortality rate for the 425 patients treated between the years of 1945-1950 was 15.7 per cent. Almost one-fourth of all patients were over the age of sixty. In this age group the mortality rate was found to be 24 per cent. A sufficient number of younger individuals died so that the average age at the time of death was fifty-six years. The fact that our life expectancy has increased has resulted in more individuals in the older age groups being alive to develop intestinal obstruction.

AGE

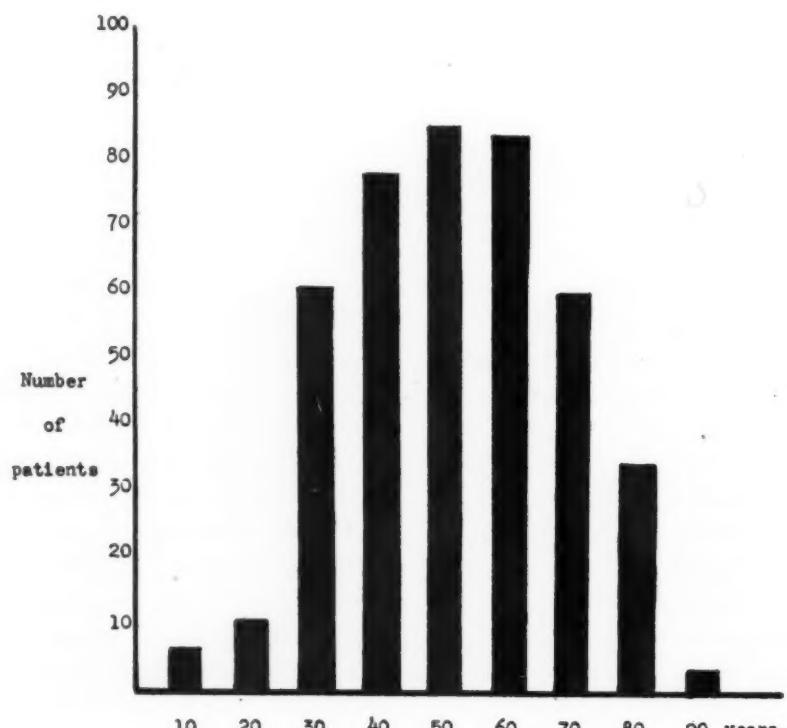


Fig. 1.

balance, use of antibiotics, and intestinal decompression. These things, well known to all interns, were unknown in 1900. The fact that the mortality rate for acute intestinal obstruction still remains 15 per cent would suggest that something was lacking in the management of this disorder.

Gibson,³ in 1900, reviewed 1,000 operations for acute intestinal obstruction. From this study certain points can be noted. The over-all mortality rate was 47 per cent whereas the mortality rate for patients over fifty years of age was 56 per cent. In comparing these findings with a review of 425

There has been a complete change in the numbers of individuals in each sex with this disorder. In 1900, 54 per cent of all patients were males and only 46 per cent of all patients were females. A ratio of males to females of 1:1 can be calculated. In 1950, 69 per cent of all patients treated for intestinal obstruction were females and only 31 per cent were males. This is a ratio of females over males of 2:1.

The etiological factors responsible for acute small bowel obstruction has shown a decided change in this fifty-year period. In the material

INTESTINAL OBSTRUCTION—CANTOR AND REYNOLDS

presented by Gibson during the ten-year period of 1888-1898 the following etiological factors were reported:

- (a) hernia 354 (35 per cent)
- (b) intussusception 187 (18.7 per cent)
- (c) bands 186 (18.6 per cent)
- (d) volvulus 121 (12 per cent)
- (e) Meckel's diverticulum.. 42 (4 per cent)
- (f) gall stones 40 (4 per cent)
- (g) openings 34 (4 per cent)
- (h) foreign bodies 16 (1.6 per cent)
- (i) miscellaneous 20 (2 per cent)

In the miscellaneous group were placed all those patients presenting a disorder responsible for less than five cases each.

In comparing these two tables of etiological factors, certain differences are obvious. It will be noted that adhesive bands were responsible for the greatest number of obstructions in our series of cases (56 per cent) whereas in 1900 only 18.6 per cent of all cases were obstructed because of adhesions. The greatest number of these adhesive bands were acquired as a result of previous surgery. Figure 2 summarizes the type of previous surgery

PREVIOUS SURGERY

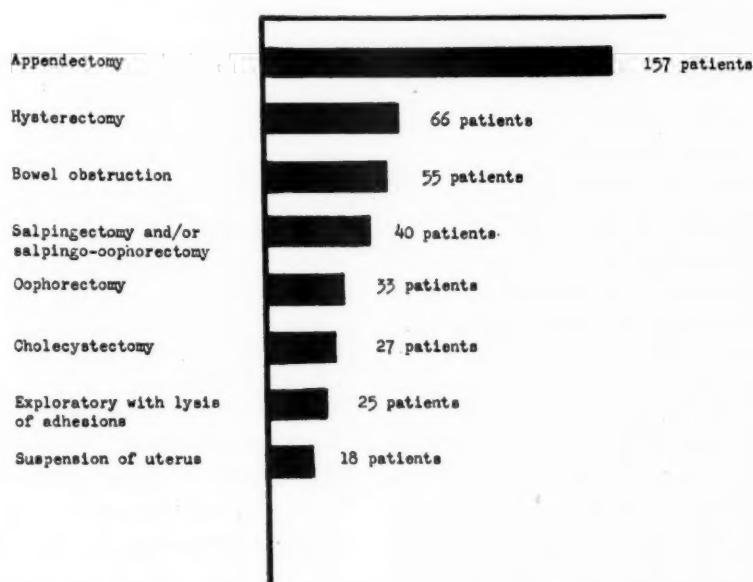


Fig. 2. Surgical procedure numbering ten cases or less: (a) resection of colon, (b) duodenal diverticectomy, (c) ectopic pregnancy, (d) caesarean section, (e) plication of utero-sacral ligaments, (f) d and c with perforation of uterus, (g) gastroenterostomy, (h) small bowel resection, (i) intussusception, (j) surgery of the bladder, (k) caecostomy, (l) closure of perforated ulcer, (m) ileocolostomy, (n) Meckel's diverticectomy, (o) ruptured viscus, (p) Noble's plication.

The etiological factors responsible for the acute small bowel obstruction in the series of 425 patients treated at Grace Hospital fifty years later is as follows:

- (a) adhesions 240 (56 per cent)
- (b) hernia 33 (7.7 per cent)
- (c) carcinoma 8 (1.9 per cent)
- (d) volvulus 11 (2.5 per cent)
- (e) abdominal abscess 12 (2.8 per cent)
- (f) gall stones 7 (1.6 per cent)
- (g) undetermined 26 (8 per cent)
- (h) miscellaneous 88 (20 per cent)

that these patients had performed. The number of congenital bands causing acute small bowel obstruction was very small. A reduction in the number of patients with intestinal adhesions would do much to further reduce the numbers of such patients obstructed. This would in turn reduce the mortality rate for acute small bowel obstruction. Many methods have been proposed for accomplishing this.^{2,4,5} Despite all these proposed methods of adhesion prevention, we suspect that the greatest single factor will continue to be the gentleness with which tissues within the abdo-

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men are handled, adequate peritonealization, and the avoidance of surgical intra-abdominal procedures unless definitely indicated. Any further reduction in mortality rate for this group of patients must be directed along these lines.

Hernia ranked second (7.7 per cent) as a causative factor in the production of small bowel obstruction in our series but ranked first in Gibson's series with an incidence of 35 per cent. This great reduction in the number of obstructed hernias is undoubtedly due to the high percentage of hernias repaired. Industrial surgeons and industry, which insists upon a physical examination before hiring labor, has resulted in great numbers of hernias being diagnosed early. Since most industries will not hire anyone with a hernia, these were repaired. Economic pressure often results in a hernial repair in many cases in which this otherwise might not be done.

Intussusception was responsible for the second largest number of cases obstructed in Gibson's series whereas less than five such cases appeared in our series. Intussusception was therefore classified in the miscellaneous group in our series. It is difficult to understand why the incidence of intussusception was so high in 1900 and so low in 1950.

Volvulus appeared to be five times as common in 1900 as compared with 1950. Dietary improvements probably play a part in the reduction in the number of such cases. This is suggested by the fact that in those countries such as India in which the diet is very meager that the incidence of volvulus is much higher than in our country.

Meckel's diverticula were found in 4 per cent of all cases operated upon in 1900 as compared with less than five cases in 1950. The only explanation for this must lie in the difference in the types of patients treated. One would not expect that there should be any difference in this type of case.

Gall stones were the cause of acute small bowel obstruction in 4 per cent of all cases in 1900 but only 1.6 per cent in 1950. Here again, cholecystectomy for the removal of gall stones has undoubtedly been responsible for reducing the number of patients obstructed from this cause. Cholecystectomy for gall stones at present is a routine and safe operative procedure. In 1900 it was a rather formidable procedure with an appreciable mortality rate.

Summary

In a review of 425 cases of acute small bowel obstruction¹ a mortality rate of 15.7 per cent was noted for the years of 1945-1950. Comparing this figure with the 47 per cent mortality rate noted in Gibson's series of 1900 one would justifiably feel encouraged by the improvement. A mortality rate of 15 per cent is still appreciable. In an effort to determine just what could be done to lower this mortality rate a comparison between the factors responsible for acute intestinal obstruction in 1900 as compared to 1950 is being herein reported. Obviously a reduced incidence in etiological factors will reflect itself in a reduced incidence of acute intestinal obstruction. This would of necessity result in a further reduction in mortality rate.

The great preponderance of females over males having acute small bowel obstruction in 1950 as compared to 1900 is solely due to the fact that considerably more pelvic surgery is being done now as compared with fifty years ago. Figure 2 demonstrates rather well the preponderance of pelvic surgery which preceded the onset of small bowel obstruction. A reduction in the numbers of such patients operated upon would appreciably decrease the number of obstructions.

An increase in the life expectancy in the past fifty years has inevitably resulted in an increase in the number of individuals above the age of sixty being treated for acute small bowel obstruction. Figure 1 demonstrates that the largest number of patients were found to be between forty to sixty years old. Twenty-three per cent of all patients were sixty to ninety years old. In this group of ninety-eight patients over the age of sixty the mortality rate was found to be 24 per cent.

Adhesions was found to be the most common cause of acute small bowel obstruction. This appeared to be three times as common in 1950, as compared to 1900. A further reduction in mortality rate from intestinal obstruction must begin with an attempt to reduce this factor. Earlier diagnosis and treatment for those patients in whom obstruction from this cause occurs is most desirable. Surgery for lysis of adhesions in the absence of acute obstruction is poor surgery. The only effect of this type of surgical intervention is the formation of more adhesions. Several patients in our series of cases were subjected to seven such operations be-

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The Diagnostic Problems of Cancer

By Raymond W. Houde, M.D.
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DESPITE the growth and expansion of cancer centers and cancer detection clinics in this country, the burden and major responsibility for the recognition of cancer while it is still curable, still rests, and properly so, in the hands of physicians in private practice. Thus whether or not he even attempts to treat cancer himself, the physician with a general practice is, at the present time, in the best position to reduce the mortality rate of this disease.

In a large hospital devoted to cancer, such as Memorial Center in New York, we have an unusual opportunity to observe what happens to the cancer patient with respect to the diagnosis of his disease. More than 8,000 persons a year are now being seen in our Examining Clinic, of which more than half have some form of neoplastic disease. This is, of course, a selected population for these are patients who come or are sent to us because it is suspected, or even known, that they have some form of tumor or cancer. Most of them are, in fact, referred to us by other physicians or hospitals, although it is estimated that about 40 per cent come of their own accord. As in most large cancer clinics we see a large number of patients who have cancer which is not early, and at the other end of the scale, not a small number of people present themselves with a variety of imposing complaints for which we can find no organic cause or with symptoms due to other diseases. Nevertheless, a considerable number of patients with early cancer and pre-cancerous lesions are seen, and it is also not a rare occasion to discover pre-symptomatic cancer in some patients who have come because of unrelated symptoms. From this experience some impression may be gained of the problems and failures to arrive at a correct diagnosis within that critical interval between the onset of the disease and its widespread dissemination, or, for all practical purposes, before it becomes incurable.

In all fairness and humility, it may be well to

state at this point that, by reason of the very nature of the processes concerned, there are important forms of cancer in which early recognition seems almost impossible of attainment by any practicable means at present, or in which the eventual outcome is not altered even when the disease is detected in its earliest recognizable form. It is chastening indeed to face up to this situation as it concerns, for instance, the leukemias, cancer of the pancreas, or of the esophagus, or even some more aggressive forms of cancer of almost every organ system. But, fortunately, these are not common forms of cancer and they are responsible for but a relatively small proportion of deaths. However, in those cases where the early diagnosis is possible and there are efficient means of eradicating the disease in its early stages, the recognition of cancer is also not always easy and here we, as physicians, assume a great responsibility.

Cancer of the breast may be taken as an example. It is the most common cancer that we encounter and many patients are seen before the classical signs develop. In any case of a mass in the breast, or a firm or discrete thickening even in the presence of chronic cystic mastitis, or a nipple rash or discharge, or any suggestion of skin dimpling or axillary adenopathy, there should be but one recourse to action and that is to obtain pathological verification of the nature of the lesion without delay. It is true that these are not necessarily the signs of cancer, for some benign lesions, such as fat necrosis, may be clinically indistinguishable from cancer, but the risk of adopting a "wait and see" attitude may lead to disaster.

Biopsy, then, is the only reliable means of establishing a diagnosis. In our Examining Clinic, this is left to the surgeons prepared to treat the patient, and this is as it should be in private practice as well. The methods of transillumination, soft tissue x-rays with or without intraductal injections, phlebograms, exfoliative cytology of nipple secretions, or even the more recent tracer studies with radioactive phosphorus (p^{32}) are not in themselves sufficiently reliable to exclude cancer, and, because of the price in time, effort or cost, they are not to be recommended for general use. The place of aspiration biopsy requires some elaboration. At Memorial, we are fortunate enough to have pathologists who are experienced in the reading of such tissue sections and the aspiration biopsy is frequently used to advantage. However, it is well to stress that this is used chiefly for con-

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venience, such as in planning large operating schedules. When positive for cancer it eliminates the need for awaiting frozen sections at operation. When negative, it means nothing and formal biopsy must be resorted to, unless after aspiration of a cyst, a mass is no longer palpable. Needless to say, in the latter case, these patients are carefully followed so as not to overlook an associated underlying mass. In so far as I know there has not been a proven case of dissemination of breast cancer by this method in our experience.

Cancer of the uterus may be accompanied by few if any signs or symptoms in its early stages. Abnormal vaginal bleeding is always an indication for thorough pelvic examination for cancer, yet certainly in cancer of the cervix, even the usual initial symptom of post-coital bleeding occurs well after the disease may be first detected. We are convinced that we cannot tell a benign cervical erosion from early cancer on sight, and I cannot stress too strongly the danger of cauterizing cervical erosions without first getting microscopic verification of what is being treated. In regard to biopsy, it goes without saying that a pathologist can examine only that bit of tissue presented to him; a small focus of early cancer may be missed unless multiple punch biopsies and/or an endocervical curettage or coning biopsy are done. The Schiller test is helpful only in pointing out areas for biopsy. The place of the Papanicolaou smears is a controversial issue. My own position on this is that if a pathologist well-trained in exfoliative cytology can be consulted, this method is a useful and convenient adjunct. The taking of the smears is a very simple procedure and may detect early cancer which is not readily visible on colposcopy. However, therapy should *not* be instituted on the basis of the cytological smear alone without confirmation by formal biopsy. If the biopsy by the multiple technique is negative, the patient should be followed carefully and have repeat smears and biopsies at frequent intervals, or should be referred to someone expert in this field.

The Papanicolaou smear may also be positive in endometrial cancer. Although it will detect a smaller percentage of cancer of this part of the uterus, recent reports of smears obtained by endometrial aspiration are encouraging.³ However, in suspected cases of carcinoma of the body of the uterus, endometrial curettage (and, of course, microscopic examination of curettings) is still the most reliable means at hand for diagnosis. As can-

cer of the endometrium most commonly occurs in older women, it may be well to stress that the normal menopause is characterized by sudden cessation or gradual reduction in frequency and amount of menstrual bleeding, and any variation from this or any post-menopausal bleeding should lead to a suspicion of cancer.

Cancer of the stomach is a formidable challenge. We do have a good diagnostic method in that a presumptive diagnosis of gastric cancer can be made in over 90 per cent of cases by combined radioscopy and radiographic examination of the upper gastrointestinal tract by a competent radiologist. *But* it would seem that the best prospect of increasing the curability of gastric cancer lies in the ability to detect this disease even before the patient is aware of any symptoms. The experience in cancer detection clinics would seem to indicate that it is impractical and too costly to routinely examine radiographically all asymptomatic patients (even those in the gastric cancer age group) every six months. On the other hand, similar experiences show that when only patients with gastric anacidity are thus screened the detection of stomach cancer rises appreciably to almost one in every 100 patients examined, and in patients with pernicious anemia to three to five per 100 examined. However, it is well to remember that gastric carcinoma can exist even when the patient has free hydrochloric acid in his gastric contents and only 51 per cent of our patients with gastric cancer have had achlorhydria. There is at this time no simple solution to the diagnostic problem of gastric cancer. The practising physician must maintain a high index of suspicion of cancer in all patients over the age of forty who present any gastrointestinal symptoms and must impress these patients with the need for further diagnostic studies. The recently devised quininium cation resin⁴ test promises to offer a ready and reliable means of detecting achlorhydria without the inconvenience of stomach intubation. This can easily be done in one's office and if gastric anacidity is found, the patient should be urged to have roentgen studies. The routine testing for occult blood in the stool, which can be done simply by doing a guaiac test on feces adhering to examining finger after rectal examination, is also very helpful. If found to be positive, this should, of course, be rechecked with the patient on a meat free diet and then, if consistently positive, search should be directed to a cause within the gastrointestinal tract. Some physicians of my ac-

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quaintance in the New York metropolitan area have been able to make arrangements with roentgenologists to do fluoroscopic examinations of the stomach instead of the regular gastrointestinal series at a considerable saving to their patients. In competent hands this would seem an excellent and reliable screening test. Needless to say all gastric ulcers should be regarded with suspicion that they may represent gastric cancer. Gastroscopy may be of some assistance in differentiating these lesions if an experienced endoscopist can be consulted. By use of the rigid gastroscope, carcinomas of the cardiac orifice of the stomach may be visualized and even biopsied. In lesions of the lower portions of the stomach, visualization by the flexible gastroscope may add to proper interpretation. Recently, Cooper² has developed an ingenious gastric balloon for securing specimens for microscopic examination by the Papanicolaou method. Early results with this technique are quite encouraging and it would appear to offer considerable promise for differentiating between benign and malignant gastric lesions. Cooper and Papanicolaou have reported over 95 per cent accuracy with this method in over 200 patients with stomach lesions.

Now passing to the lower end of the gastrointestinal tract, there is good reason here to do much better than we are doing. Seventy-five per cent of all cancers of the rectum are within reach of the examining finger and it is surprising to see how many we have seen which were missed or not picked up earlier before coming to our clinic. It should be unnecessary to point out that a digital rectal examination is a necessary part of any adequate physical examination. A frequent error is to attribute rectal bleeding and/or other lower bowel symptoms to hemorrhoids without looking further. In any patient with rectal bleeding or lower bowel symptoms, proctoscopy and a barium enema are indicated whether or not the patient has hemorrhoids or anal fissures for it is not unusual to find these as concomitant findings in patients with cancer of the lower bowel. Approximately 60 to 70 per cent of all large bowel cancer should be within the reach of the proctosigmoidoscope and it should be within capabilities of the average practitioner to be able to do this examination. In the Strang Cancer Detection Clinic at Memorial, polyps have been found in one out of every twenty patients proctoscoped and this is done there as a routine in all patients over forty-five years of age and in those who have guaiac positive stools. Five per cent

of these polyps were cancer. When seen, a polyp should, of course, always be biopsied and removed, although the latter should be left to the proctologist or surgeon prepared to treat the patient. The barium enema followed by air contrast studies is a reliable means of detecting lesions higher in the large bowel. It does not substitute, however, for the digital rectal and proctoscopic examinations. Apparently this is not generally recognized. A case that I have seen recently may serve to emphasize this point. This man who had lower bowel symptoms, went to his doctor and was sent directly to a radiologist for a barium enema. The barium enema was reported negative and thereupon his physician told him nothing was wrong. The patient, however, was not satisfied with this opinion, and came to our clinic. His symptoms suggested cancer of the lower bowel and indeed an annular mass was palpable on digital examination. This was readily confirmed by proctoscopic examination and proved by biopsy to be cancer.

Cancer of the lung appears to be assuming increasing importance. Many recent reports indicate that there is a real and alarming increase in the incidence of lung cancer in both men and women. Moreover, it is becoming apparent that, as in stomach cancer, the best prospect for improving results in the treatment of this disease also rests upon its detection in the pre-symptomatic phase. To await the attendance of symptoms will mean that the large majority of patients will be found to have disease which has extended beyond the confines of the lung. The simple expedient of the routine x-ray examination of the chest is still the most useful method for detecting lung cancer even though it has no characteristic or pathognomonic roentgen appearance and may mimic other diseases. However, resort to the adjuvant procedures of bronchoscopy and exfoliative cytology of sputum or bronchial washings will resolve these difficulties in a large percentage of cases. In some instances where a lesion is situated in the periphery of the lung fields or diagnosis cannot be established by the Papanicolaou smears or bronchoscopy, aspiration biopsy under fluoroscopic control has often been used successfully at Memorial for establishing the diagnosis. However, in recent years this procedure has not been used as frequently as formerly on our Thoracic Service, primarily because the exfoliative cytological method has greatly extended our diagnostic capabilities and also because it would seem

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that exploratory thoracotomy can now be undertaken with no greater risk than exploratory laparotomy.

The late Dr. James Ewing is said to have once remarked that cancer is not one disease, it is a thousand different diseases. The ramifications of the problems encountered in the diagnosis of cancer would seem to bear witness of this. In this presentation I have merely touched some high points of a few of the more common forms of cancer and have, of course, omitted discussion of many challenging problems with regard to head and neck cancer, the lymphomas and leukemias, thyroid cancer, cancer of the urinary tract, and cancers of many other organs which are not any less important. To have included them, however, would have made this presentation unavoidably long.

By way of summary I should like to state that there is *no* single simple biologic test which is a reliable indicator of cancer *per se*. Yet, much can be accomplished with what we already have at hand and the physician in private practice is in the best position to change our outlook on cancer. The accomplishment of this depends in good measure on maintaining a high index of suspicion of cancer, particularly in older patients, and a determination to attempt to recognize cancer in its pre-symptomatic stages. There is no substitute for the taking of a careful history and doing a complete physical examination. All patients with a previous history of cancer, or with diseases such as Page's disease, chronic cystic mastitis, benign

gastric ulcers, polyps of large bowel, pernicious anemia and other diseases in which cancer is more likely to develop should always be especially watched and followed carefully. Roentgen examinations and the new methods of exfoliative cytology are important adjuvants for the diagnosis of pre-symptomatic cancer, particularly of the stomach and lung, and these and other ancillary studies can be reliable diagnostic tools when properly used. Finally, when there is even the mere possibility that cancer exists, therapy should never be undertaken without first attempting to obtain microscopic verification of what is being treated. In closing, I might point out that Cameron,¹ of the American Cancer Society, estimates that even with the case finding methods now available, the over-all curability of cancer of the uterus can be increased from the present overall rate of 30 per cent to 80 per cent, of cancer of the breast from the present 35 per cent to 65 per cent, and of cancer of the rectum from the present 15 per cent to 85 per cent.

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INTESTINAL OBSTRUCTION

(Continued from Page 1196)

fore becoming acutely obstructed. The only indication for surgery in this group of patients should be the presence of acute intestinal obstruction.

The reduction in the percentage of patients with obstruction caused by hernia from 35 per cent in 1900 to 7.7 per cent in 1950, attests to the value of early repair or correction of all potential sources for bowel obstruction. The same may be said for the reduction in gallstone ileus from 4 per cent in 1900, to 1.6 per cent in 1950.

In the final analysis, the clinical judgment of the attending physician or surgeon and his ability

to handle this type of problem is our only hope for decreasing the mortality rate further.

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Some Observations on the Diagnosis and Treatment of Varicose Veins

By John G. Slevin, M.D., F.A.C.S.
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DESPITE important refinements in diagnosis and surgical technique, the ideal treatment for varicose veins has not been found. Nor, is it likely that medical science will devise any "perfect cure" for this disability as long as people continue to inherit weak veins and engage in occupations requiring prolonged sitting and standing.

Heredity probably accounts for the tendency to varicosities. But it is only when people fail to exercise their legs by regular walking that primary varicose veins are likely to develop. Many industrial workers, who stand for eight hours a day and who ride to and from work, suffer from this vascular disorder.

In the treatment of this disability, the first step, as in every medical or surgical case, starts with a careful history. Such a history in varicose vein cases can be quite brief but is necessary to determine the importance of varicose veins to the individual. Often some other disability may be uncovered which is the basis for symptoms erroneously attributed by the patient to varicose veins. For example, many patients attribute pain in the calf muscles to varicosities when the real trouble is due to pes planus. Obviously, vein ligations will not relieve them of the muscle strain incident to their flat feet.

The history may help to determine whether the varicose veins are primary or secondary. If they are secondary to an old deep femoral phlebitis, ligation of the saphenous system will not rid the patient of his chronic edema. All these salient points of history can be elicited in a few minutes if the doctor has his questions marshalled in his mind and does not wander to unrelated fields.

Method of Examination of Legs

No one should elect to treat varicose veins who does not have the time to properly examine and evaluate each case. Most of the failures can be traced to inadequate preoperative diagnostic work. In all cases of varicose veins, the physical

examination should cover the essentials of heart, lungs, abdomen, blood pressure, and urinalysis especially if surgery is contemplated. But no one who professes to treat varicose veins is justified in giving the lower extremities a cursory look and calling that an adequate examination.

To examine the lower extremities, the patient should stand on an elevated platform in bare feet with no encumbrance of clothing below the pelvis. Such a platform can be easily constructed at small expense. The examiner should inspect the legs in a good light, anteriorly and posteriorly, noting the size and distribution of the veins, the color of the skin, rashes, ulcers, et cetera. He should mark with ink any bulges in the veins as possible sites for "blowouts." These bulges are frequently seen where an incompetent perforating vein joins the saphenous system. He should also note any orthopedic defects, such as flat feet. Skin temperatures can readily be determined by the hand. If edema is present, the degree of pitting should be determined and whether it is bilateral or unilateral. After this preliminary inspection, the patient should be seated on the examining table and the dorsalis pedis, posterior tibial and popliteal pulsations felt. If they are absent, oscillometric readings should be taken.

The next step is to do one of the modifications of the Trendelenburg test.¹¹ Since 1940, we have used the multiple tourniquet test described by us in a previous publication.¹⁰ In our hands, this test has proved invaluable in the accurate location of incompetent communicators ("blowouts"). Pratt's⁸ test may also be used for the same purpose. We found it more time consuming and no more accurate than the multiple tourniquet test. The same may be said for Oschner's⁵ modification of the Perthes' test.⁷ Oschner's test is of value, however, in cases of slow "blowouts" where one cannot be sure of the diagnosis.¹

Multiple Tourniquet Test

The multiple tourniquet test has enabled us to locate the exact level of incompetent perforators in the majority of cases. This test is done as follows. With the patient prone on the examining table, the leg is elevated until all superficial veins are emptied. Soft rubber tourniquets are placed at the sapheno-femoral junction, mid thigh, low thigh, just below the knee and in mid leg. The patient stands. Tourniquets are removed, one at a time, from below upward. The examiner

observes each segment as the tourniquet is loosened for any evidence of filling of the veins. If a vein fills that segment it is marked lightly with ink. When all tourniquets have been removed, the test is repeated. This time, the tourniquets are placed at the levels suspected of being the site of incompetent perforators. Several such repeat tests may be necessary to be sure that the exact site of the "blowout" is located. It is important that the multiple tourniquet test be done at least once while observing the posterior aspect of the leg and thigh. Only thus will incompetence of the lesser saphenous system be discovered.

To be sure that no, "blowouts" are missed, it is advisable to perform a Perthes' test, placing the tourniquet below the lowermost level of incompetence. If, after the patient has walked briskly for five minutes, all veins below this tourniquet are empty, we may be certain that no "blowouts" exist below the level of the tourniquet. This is helpful in doubtful cases. It also serves to test the ability of the deep system to function adequately.

When the various levels of communicator vein incompetency have been determined, the examiner should, first, note in his record the exact location of each "blowout" and, second, mark such "blowouts" by some method so that they can be located at the time of surgery. I have found that the use of a 70 per cent silver nitrate applicator, moistened with water and lightly touched to the spot of the blowout, will leave an easily recognized mark for about ten days. Caution should be exercised not to place too heavy an application of the silver nitrate on the skin or a slough will result. If surgery is to be done within several days, an alternate method is the use of scratch marks made with a 20 gauge hypo needle.

Vein Stripping Versus Multiple Ligations

During the past decade, the pendulum in vein surgery has swung back to the various vein stripping procedures which were first used at the turn of the century. Either the extraluminal stripper introduced in 1906 by Charles Mayo⁶ or the inter-luminal acorn tipped strippers advocated at that time by Babcock² are being employed. Numerous modifications of these two types of strippers are in use at present. Vein stripping was abandoned thirty years ago because of the associated high morbidity. Reasons given for its revival were that (1) too many incompetent communicators were being missed and (2) available methods of diag-

nosis were inadequate to locate such incompetent veins. Without doubt, the first reason was true as long as the classical Trendelenburg test was used. The second reason is questionable since there are at least three tests available to locate "blowouts," namely, Pratt's test, Oschner's test and the multiple tourniquet test.

The surgeon need not choose sides between multiple ligations and vein stripping. The choice should be based upon the patient's individual needs and not upon preconceived surgical ideas. Both methods have their place in the surgeon's armamentarium. He must weigh the value of the radical stripping procedure with increased hospital stay and morbidity against the less mutilating but equally effective multiple ligation procedure. In our hands, the multiple ligation procedure has yielded a recurrence rate of only 3.4 per cent in two hundred ligations.¹⁰ Vein stripping procedures give about the same recurrence rate. This is because it is almost impossible to remove all the superficial veins in the leg unless very radical surgery is employed. As now performed, stripping removes the greater saphenous vein but not the principal branches. Complete extirpation of the entire superficial venous system is not practical.

Which cases then should be reserved for vein stripping? In my opinion, those patients should be selected for stripping where the veins are large and where more than three "blowouts" are found in the same leg and also where there may be several questionable "blowouts" of the slow leak variety. In such instances, the additional incisions needed for stripping will not greatly add to the morbidity.

However, when multiple tourniquet tests, carefully done, indicate the presence of only one or two "blowouts" in addition to incompetence at the sapheno-femoral junction, it seems advisable to confine surgery to combined high-low ligations. Such surgery will usually incapacitate the patient for only two or three days instead of the usual seven to ten days needed for recovery from stripping procedures. This is of importance to those patients who cannot afford the greater loss of time from work required by stripping. The surgical dictum should be to do the least amount of surgery that will do the most good. No matter which type of surgery is selected, vein stripping or multiple ligations, it is essential, as Homans⁴ emphasized nearly forty years ago, to ligate the saphenous vein at its junction with the femoral vein as well

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as to ligate all branches of the saphenous vein in the region of the fossa ovalis. Many recurrences come to our attention because one or more branches have been overlooked. Also, the saphenous vein itself sometimes is missed when a large branch is mistaken for it. These errors can be avoided by adequate exposure of the sapheno-femoral junction.

When To Use Sclerosing Solutions

Since Secard¹ popularized the injection of veins with sclerosing solutions in 1920, we have learned that the injection of sclerosing solutions alone will not affect permanent obliteration of varicose veins when the Trendelenburg test is positive or double positive. The procedure of retrograde injection of sclerosing solutions, extensively practiced until vein stripping was revived, was fraught with considerable danger of deep thrombo-phlebitis.^{1,3} It was never a satisfactory adjunct to the surgical procedure. However, postoperative injection of remaining varicosities often is necessary to complete the treatment. It is a relatively safe procedure if (1) ligations have been adequate and (2) the amount given at a single session is limited to 3 or 4 cc.

Regardless of the type of surgery, there should be a regular periodic follow-up of these cases at approximately a six months' interval. Each patient should be told at the time of surgery that there is no known treatment which can eliminate the inherent weakness responsible for his having varicose veins. At each check-up examination, any small varicosities seen should be injected with sclerosing solution. This procedure, in my hands, has resulted in only two recurrences among some 300 patients seen since 1945. That is, of some 300 patients with varicose veins, only two suffered a recurrence within a six-month period. Both were bartenders. On the other hand, we have seen recurrences following both multiple ligations and vein stripping in those patients who have had no follow-up. The average period for recurrence is about two years.

Summary

Although there is no known method for the treatment of varicose veins which will result in a

permanent cure in all cases, refinements in diagnostic technique have resulted in more accurate ligation of incompetent perforating veins. The multiple tourniquet test, in our hands, has led to an accuracy in the location of such incompetent veins resulting in a one-year recurrence rate in 200 cases of only 3.4 per cent.¹⁰

The multiple tourniquet test has been described. It was pointed out that only by careful examination can a low recurrence rate be achieved.

The choice between multiple ligations and vein stripping should be determined on the basis of the patient's need and not on the basis of preconceived surgical opinion. Vein stripping should be reserved for those cases with three or more "blow-outs" in the same leg. Only then can the added morbidity be justified.

The surgeon should stress the need for follow-up examinations at six-month intervals. If small varicosities are discovered, they should be treated by sclerosing injections before they become large enough to cause symptoms and before incompetence of communicating veins occur. Only thus is it possible to prevent the recurrence of varicose veins.

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Our Heritage in British Medicine from Bright to Gull

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JUST a quarter of a century ago, it was my good fortune to spend a period of months in sundry medical haunts of the British Isles. Much water has passed under the bridges of the world since those meanderings; but the semi-youthful enthusiasm of that time developed, and a more mature appreciation has fostered, a deep regard for the then current luminaries of British medicine and, perhaps, in particular, for those worthies on whose shoulders they stood—those who had peopled the medical scene the century before.

One cannot go far in the history or philosophy of medicine without coming much into the literary company of the late Sir William Osler. Following the dictates of one of his most charming essays, I was indulging myself some time past in the reading of a recommended minor classic—"Middlemarch," by George Eliot. This novel covered fictionally a considerable segment of this before-mentioned epoch in British medicine and temporarily, at least, set askew the halo which I had placed over that period.

For writing in 1872, the year before Sir William Gull gave his classic description of myxedema, the author, sketching a young physician's start in practice, indulged herself in the following paragraph:

"Lydgate would keep away from the range of London intrigues, jealousies and social truckling and win celebrity, however slowly, as Jenner had done, by the independent value of his work. For it must be remembered that this was a dark period in British medicine, and in spite of venerable colleges which used great efforts to secure purity of knowledge by making it scarce and to exclude error by a rigid exclusiveness in relation to fees and appointments, it happened that very ignorant young gentlemen were promoted in town and many more got a legal right to practice over large areas in the country. Also, the high standard held up to the public mind by the College of Physicians, which gave its peculiar sanction to the expensive and highly rarified medical instruction obtained by graduates of Oxford and Cambridge, did not hinder quackery from having an excellent time

of it; for since professional practice chiefly consisted in giving a great many drugs, the public inferred that it might be better off with more drugs still if only they could be got cheaply, and hence swallowed large cubic measures of physic prescribed by unscrupulous ignorance, which had taken no degrees."

This, then, was the pessimistic impression of medical practice in the British Isles, in the year of our Lord 1829, when the fictional Lydgate, who has become the personification of the intelligent eagerness of the young family doctor, entered into the practice of our noble art. Was the picture a true one? Was the dour opinion of this erudite lady by the ambiguous name of George, a fair picture of the medical time? Let us survey the record!

A little Corsican had swashbuckled his relatively unchecked way across most of Europe, and had failed in his final quest for power at Waterloo (and he was not the last little corporal to follow a similar course). He had gone from his prison spot on St. Helena eight years before, to meet his Marshals in some other land, and Europe was at peace again.

The Gold Headed Cane, after gracing the hands of England's most eminent physicians, from Sydenham to Jenner, had just come to rest in a corner of the library of the fifth and newest home of the Royal College of Physicians, in Pall Mall, where, although somewhat blasted and bashed by bombs, it serves this same function today.

Two years later, Jenner, having removed another scourge from humanity in giving life and scar-saving utility to cowpox, having given what was probably the first description of disease of the coronary arteries as a cause of cardiac failure, characteristically enough, had been borne, though Westminster Abbey beckoned, no further than across his own garden plot to the chancel of Berkeley Church in Gloucester, to take his well earned rest.

James Parkinson, with Jenner, another of John Hunter's pupils, had given his classic description of paralysis agitans and reported the first case of appendicitis in the English language. Dying in 1824, he was perhaps the first of note in that line of brilliant workers at Guy's Hospital in London—"the great men of Guy's"—whose worth was just being recognized in the blooming genius of his young successors, Bright, Addison and Hodgkin.

Richard Bright, after some thirty-one years spent in preliminary and medical education and travel, came to Guy's Hospital and started a career marked

Presidential address presented before the Detroit Academy of Medicine.

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by great industry, accuracy of observation and clear judgment. His particular interest, even from his student days, was in the morbid anatomy of the kidney. He spent from four to six hours a day in the wards and post-mortem chamber, and just seven years later, published his "Report of Medical Cases" containing, among other things, his original description of essential nephritis and for the first time a clear-cut distinction between cardiac and renal dropsy was made. Bright's picture, excepting the microscopic appearance of the kidneys, biochemical alterations in body economy, and the frequent concomitance of high blood pressure, would very well stand today. This was not his sole contribution by any means, for he was a pioneer in cerebral localization, gave one of the earliest pictures of acute yellow atrophy of the liver, was the first to mention the frequency of heart murmurs in chorea and the first to demonstrate the presence of hooklets in echinococcus cysts. Even with his voluminous writings, Bright taught students for a quarter century, was an increasingly busy practitioner of medicine, and the most sought after consultant in London. He was a kindly, unassuming man with a host of friends, who approached everything with a philosophic verity. It was said of him that there were few who recorded so much and reasoned so extensively, who had subsequently to retract so little. He died in 1858, at the age of sixty-nine, probably pathologically as well as literally of "Bright's disease." He, who had used the post-mortem chamber so extensively, would allow no autopsy to be done on himself.

Bright's closest contemporary and associate at Guy's was Thomas Addison, who had come to the hospital in practically the same year and a decade and a half later became joint lecturer with him in Medicine. The two men upheld and raised the fame of Guy's by their co-partnership. Like Bright, Addison was a keen clinician, an ardent habitue of the post-mortem chamber, and based his investigation on careful clinical and autopsy observation. His first published work, "The Operation of Poisonous Agents on the Living Body," was the first serious investigation in England into the phenomena of systemic poisoning. However, the achievement of Addison which attracted the most general notice was his discovery of a disease of the suprarenal capsule, which has since gone by his name.

At consultation on a clinical problem which had baffled the investigations of his confreres, Addison, after careful inquiry, stated positively that the

patient suffered from a disease of the suprarenal bodies, which would before long prove fatal. This opinion was received with polite incredulity, but it was proved correct by autopsy, the suprarenals being the only organs diseased. Of course, the disease was not discovered in this apparently sudden and striking manner, but was the result of many years' observations, in which Addison's powers of deduction from a few cases and meager data were strikingly evidenced. In the preface to his treatise on "The Constitutional and Local Effects of Disease of the Suprarenal Capsule," read before the South London Medical Society in 1849, he described a condition perhaps more prevalent and of greater clinical importance than Addison's disease *per se*. This was pernicious anemia, also called Addison's or Addison-Biermer anemia, which just seventy-five years after his initial description fell largely under the control of an effective medical approach.

Similar as were their professional habits and points of view, Addison was, in person, in striking contrast to Bright. The latter was the son of wealthy parents, had had every advantage that travel and education could bring, and was handsome, cheerful, sociable and popular wherever he might be. Addison on the other hand, came of humble origin, with little of this world's goods and with a youth spent, in consequence, in hard work for a livelihood. He lacked the other's cheeriness and charm, was blunt, and at times presented the impression of a haughty rudeness and arrogance, much of which was but a cloak for his innate shyness. His powerful frame concealed a most acute nervousness of temperament which most deeply affected him in times of trial. He has said of himself, "I never rose to address the Guy's Junior Physical Society without feeling nervous." Yet his listeners would depart with the feeling that he had spoken to them in a tone of bluster and self-assurance. He continued his fruitful and valued association with Guy's Hospital until a few months before his death from some brain disorder, in 1860.

The third addition to this famed triad was Thomas Hodgkin, as different from each of the others in his personal characteristics as it was possible to be. He was a consistent member of the Society of Friends and always wore their dress and employed their distinctive forms of speech, in his writings as well as in his talk. A philanthropist and reformer by nature, it was apparently this independence of spirit which drove him away from

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Guy's after a relatively short association of ten years. During his stay he served as curator of the hospital museum and demonstrator of morbid anatomy, to the special advantage of the School and to the advancement of pathology throughout the world. Hodgkin was the first to describe clinically the condition characterized by simultaneous enlargement of the spleen and lymphatic glands (which had been outlined pathologically, however, by Malpighi in 1665). Nevertheless that devoted and illustrious biographer of Guy's Hospital, Samuel Wilks, proceeded to stamp it as a clinical entity with the name, "Hodgkin's Disease," and as such it has remained. Hodgkin himself had no intention of defining as a pathological entity this frequent association of lesions, which, as he himself stated, must have been observed repeatedly by other pathologists. A careful analysis of his paper, "On Some Morbid Appearances of the Absorbent Glands and the Spleen," makes it clear, in the light of modern knowledge, that he was dealing with cases of varied etiology, including general tuberculosis, the leukemias, and perhaps the lympho-granulomatosis. Even today, a century after Hodgkin's report, the classification of the individual members of these affections of the lymphatic system is anything but simple; and in that day, before the development of cellular pathology, and before more modern methods of blood examination had come into existence, such differentiation was usually quite impossible.

Hodgkin gave a description of insufficiency of the aortic valves, which antedated Corrigan's by three years, and his "Essay on Medical Education" published in 1828, remains a classic still. After his unsuccessful candidature for the post of assistant physician at Guy's he resigned to take a similar position at St. Thomas Hospital. Away from his beloved specimens, which he had so painstakingly collected through his years at Guy's, he soon became dissatisfied and went into the private practice of medicine in London. But he was exceedingly generous by nature and careless in collecting fees; he gradually dropped out of the medical scene and devoted the latter years of his life to philanthropic work. It was in this latter capacity that Hodgkin formed his deep and lasting friendship with Sir Moses Montefiore, the Jewish philanthropist; it was while traveling with Sir Moses in the Orient that he died, at Jaffa, of dysentery, in 1866, at the age of sixty-eight.

In addition to his individual genius in the art

of medical and pathological observation and correlation, each of the foregoing—Bright, Addison and Hodgkin—had further common ties. Their respective medical degrees bore the name of Edinburgh University. It is interesting to digress momentarily to consider that seat of learning in the "Athens of the North" and the part it played in the period that we are scanning.

During the last half of the eighteenth century, with the stimulus of the Hunters, the Monros, Cullen, Whytt and their less famous associates, Edinburgh University had become the medical Mecca for the English-speaking world, with most of its medical faculty stemming from the scant teaching ward of Boerhave in Leyden. American medicine had its birth within those walls, in the persons of Morgan, Shippen and Rush from Philadelphia, in particular. With their return to the American colonies, they took the first steps in the organization of American medical education by the forming, at the College of Philadelphia in 1765, the Medical Department of the University of Pennsylvania. This was the first medical school in the Colonies. But, more germane to our discussion, Edinburgh University nurtured, as well, those men who were to be the pillars of the Dublin School of Medicine, which, although its prime lasted but a few decades, did far more than its share to advance clinical medicine. The Dublin School competed on at least even terms with the "Great Men of Guy's," a few of whose members we have just considered.

Perhaps the true founders of the Dublin School were (1) John Cheyne, who in 1815 published a paper on "Acute Hydrocephalus" and three years later gave his original observations on rhythmical ascending and descending periods of respiration; (2) Abraham Colles, a surgeon whose particular interest to the clinician lies in his promulgation of Colles' law in regard to hereditary syphilis, and (3) Robert Adams, who left classical accounts of essential heart block and "rheumatic gout." Others were William Wallace, who is remembered for the introduction of the use of potassium iodide in the treatment of syphilis, in 1836, and Frances Rynd for the initial employment, in 1845, of hypodermic injection of medications by an ingenious gravity device of his own invention. But the names looming largest in the annals of the Irish school were those of Graves, Stokes and Corrigan, who, in their influence on internal medicine in America,

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compare with John Hunter and Astley Cooper in theirs upon surgery.

All were born in Dublin, Robert Graves a few years the senior of the others. Although the son of a clergyman, he apparently had considerable means at his disposal, for after graduating in medicine, he made a three-year tour of the various European medical clinics.

Graves inherited the natural humor of his race. Stokes, who had been his pupil for a short time and then his life-long friend, said of him at this time,

"Nature had been bountiful to him. He was tall in stature, dark complexioned, and with noble and expressive features. He had at once a warm and sensitive heart and ever showed lasting gratitude for the smallest kindness. His mind was open and unsuspicious, but occasionally he fell into the error of thinking aloud, without considering the nature of his audience and of letting his wit play more freely, and his sarcasm cut more deeply than caution might indicate."

Though Boerhaave had utilized the bedside method of teaching one hundred years before, and that reportedly on a twelve-bed ward, it was left for Graves and his associates to popularize it. They consistently and successfully used the bedside teaching method in the Heath Hospital and the Park Street School of Medicine, of which Graves was co-founder.

According to Reisman, "Physical examination at that time had barely emerged from its age-old chrysalis. Percussion was still in the hands of the few, notwithstanding the fact that Auenbrugger's great discovery was more than fifty years old and the translation of his book by Corvisart, the method's foster-father, about twenty. The stethoscope was looked upon by many as a toy. Physical examination was considered of minor importance, and just as men today are prone to inveigh against the laboratory as stifling the older methods of careful physical examination, so in the days of Graves and Stokes, it was common practice to decry the Laennecian method and that of Auenbrugger as threatening to cause a neglect of the study of symptoms."

At the bedside, Graves appeared to best advantage. Protecting the patient always, he made bedside teaching more than didactic instruction, and by giving the students genuine responsibility in the examination and care of patients, he succeeded in bridging "the impassable gulf which in that aristocratic era lay between the student and the teacher."

This departure in clinical instruction probably

constituted Graves' greatest contribution to medicine. Generally, he is best known for his description of hyperthyroidism, in 1835, a description which, while it was not the first, was so complete that it carries his name even now. He emphasized pulse taking by the watch, first observed the pinpoint pupil, and in his "Clinical Lectures," which covered almost the entire field of medicine, he gave to the world a treatise of sufficient worth to have his great contemporary, Trousseau, from the other side of the channel, say to his students:

"For many years I have spoken well of Graves in my clinical lectures. I recommend the perusal of his work; I entreat those of my pupils who understand English to consider it as their breviary; I say and repeat that of all the practical works published in our time, I am acquainted with none more useful, more intellectual."

It was a peculiar paradox, adhering as he did throughout to the essentiality of fever, and looking upon it as a disease entity, that Graves should have been the one to cease starving and purging patients, as was the habit of the time, and to institute tonic and supportive measures. Graves felt the value of this change so strongly that, in expiating to some friends on the healthy appearance of some recovered typhus fever patients in the convalescent ward, he said, "This is all the effect of our good feeding and lest, when I am gone, you may be at a loss for an epitaph for me, let me give you one in three words—'He fed fevers'!" His prodigious labors shortened his life, and he died of some liver disease in 1853, at the age of fifty-seven, as Alfred Stille styled him—"One of the great ones of the earth!"

The association between Graves and Stokes has been mentioned. It was a rare and admirable one, of such a character that it helped greatly to strengthen their mutual influence upon their immediate pupils and the world at large. Whenever an important controversial issue arose, as for instance the use of the stethoscope in auscultation, they entered the lists together, neither jealous of the other. The opposition to this instrument was more intense than can be imagined in this present day, and a large measure of credit must be given to the diligence and enthusiasm of these two men, in popularizing its use.

Stokes had seized the cudgel at an exceedingly early stage, for in 1825 (Laennec, 1819) while a twenty-one-year-old student at Edinburgh, he had published a small octavo volume of 239 pages, en-

titled, "An Introduction to the Use of the Stethoscope, with its Application to the Diagnosis of Diseases of the Thoracic Viscera, including the Pathology of these Various Affections." This was the first work on the subject in the English language, and for it he received seventy pounds, which was no mean sum in those days.

This evident precocity was borne out by his life's work, and while his name is perpetuated for all time in connection with Stokes-Adams disease and Cheyne-Stokes breathing, these are actually among his lesser contributions. He shared in much of Graves' work and did as much through his clinical teaching to give physical diagnosis the place that it deserves in medicine. He added further support by his written treatise on "Diseases of the Chest and Aorta," which for its wealth of observation and its clarity and accuracy of description, constitutes a classic in medical literature. Stokes himself said: "If you would advance a knowledge, be content to take up the thread where the last investigator laid it down and set yourself to carry on his work." Laennec was his guiding star and he had set himself to the task of improving the status of mediate auscultation. He was the first to use the finger as a pleximeter in percussion, however peculiarly, advising that the finger so used be placed with the dorsum towards the chest. In 1845, he succeeded his father as Regius Professor of Medicine at the University of Dublin. Although overwhelmed by a huge private practice he continued to teach and to write until his retirement. He was a close student of human nature and had a saving sense of humor, particularly during the awful days of the cholera epidemic, when he himself suffered from the disease. The highest honors that the medical world could bestow were his, but he prized above them all the degree of doctor of medicine honoris causa from his own University of Dublin. He died at the age of seventy-four, beloved as a man, revered as a teacher and honored in every way that a grateful profession could show its appreciation. Everything that he had written was a model of succinct completeness of description, with a conciseness and clarity that warrant wide imitation. In his remarks on the optimism of the tuberculous patient, he said, "The destruction of the lung causes a relief to the patient, and too often we may hear the voice of hope and confidence reverberating in the cavity that seals that patient's doom."

To vie with such contemporaries as these on

anything like even terms would have taken a man of far from ordinary stripe, and such was Dominic John Corrigan. After graduating from Edinburgh, he returned to Dublin and associated himself with the Jervis Street Hospital, the master of a medical service of six beds. However, a proper selection of patients and thorough study of the cases at hand allowed him to present a monograph on "Permanent Patency of the Mouth of the Aorta, or Inadequacy of the Aortic Valves," so comprehensive that the intervening years have added little to this fundamental knowledge of aortic regurgitation. Although not the first to discover the disease (the French claim that honor for Vieussens, the English for Cowper or Hodgkin), Corrigan's account is by far the best, and justice is not violated by preserving his association with it in naming the associated pulse, which he so well described, as Corrigan's pulse. He likewise described the expansile pulsation of aneurysm. His reputation and practice gained him eventually much wider hospital associations, particularly with Hardwick Fever Hospital, as a result of which association he prepared a series of lectures on "The Nature and Treatment of Fever," which he published in 1853.

There were many other publications of varied subjects, a number being derived from his keen interest in pathology, which, with his bedside clinics, his kind disposition, and his tireless application to his work, are said to have reminded one of the great Osler, who was to come. Corrigan was a thoroughly big man in every way and competent in numerous fields of endeavor. With his Dublin confreres he shared the constant and active desire to make a better and more fertile field for clinical medicine. In 1847, he was appointed honorary physician in ordinary to Queen Victoria, an unusual distinction for a Catholic. Although blackballed as a presidential candidate by the Royal College of Physicians of Ireland, when his name first came up, he was eventually its president for five consecutive years. His character and personality, his devoted efforts to improve the condition of his fellow men and his scientific achievements readily rank him as one of the great British physicians of the past. As Hancock has said,

"Corrigan was the last to go, and at his death the Dublin School of Medicine became a part of medical history, but its enviable position for that short span must be forever fresh in the memory of every clinician. Until Judgment Day physicians will bring into the world babies born under Colles' law; and will treat some of them

OUR HERITAGE IN BRITISH MEDICINE—McKEAN

later with potassium iodide* solution as advocated by Wallace, particularly if there be the expansile pulsation of aneurysm or the ill sustained pulse of aortic regurgitation, as noted by Corrigan, or the slow pulse of the Stokes-Adams syndrome, or if there be luetic involvement of the auriculo-ventricular bundle. The development of the Cheyne-Stokes respiration will often warn of death's approach and the end will be more peaceful and free from pain when some modification of Rynd's suggestion for the hypodermic injection of medication is followed. And for all time, as students walk the wards and are permitted direct contact with patients for the purpose of emanuensis and physical examination, they should give continuous thanks for this privilege to the influence of the Dublin school on medicine, at large, and on American medicine, in particular."

Up to this point, our remarks have been restricted to a few men, who would have graced any land at any time. Returning to England again, we find an additional number, each doing his own bit to advance medicine in one direction or another. Marshall Hall first demonstrated the reflex arc which brought him so much obliquity and derision in his own country that he could procure no hospital appointment and was able to secure publication of a paper with the greatest difficulty. John Jackson, a pioneer in the diagnosis of diseases of the nervous system and whose name is commemorated in the term Jacksonian epilepsy, was the first to establish the use of the ophthalmoscope in the diagnosis of diseases of the brain. Sir William Gowers, another of the founders of modern neurology, was the first to devote his attention to the minute anatomy of the nervous system, as well as to the clinical aspects of its diseases. Edmund Parkes, pioneer epidemiologist, was appointed to the first chair of Hygiene founded in England in 1860, and, in 1864, published his epoch-making, "Manual of Practical Hygiene." William Banting introduced the control of obesity by the general reduction of foods, particularly carbohydrates and fats in his "Letter on Corpulence" in 1863. F. W. Pavy deserves mention because, by disagreeing with Bernard loudly and in vitriolic terms, he did much to familiarize his English-speaking confreres with Bernard's views on the glycogenic function of the liver. He was apparently one of the few men in England who, despite the fact that there was a Banting as a contemporary, had any interest in diabetes mellitus.

While this paper's primary dealing is with the clinicians of this period, we must turn aside to make brief mention of certain medical contribu-

tions by their surgical confreres. Sir William Bowman contributed to the physiology of the kidney by first voicing, in 1842, the mechanical theory of the secretion of the urine by osmosis. James Y. Simpson first advocated the use of chloroform in anesthesia. Although this came the year after Morton, Jackson and Bigelow had launched ether, Simpson started a heated argument which continues to this day on this side of the waters. James Paget, that brilliant man whose written work had as much to do with medicine as with surgery, has had his name perpetuated in its association with two diseases, namely, eczema of the nipple, with subsequent mammary cancer, and osteitis deformans. The name of Jonathon Hutchinson is memorable to us on account of his description of the notched, peg-shaped incisor teeth in congenital syphilis, and his associating the teeth with the interstitial keratitis and eighth nerve deafness of this same condition,—"the Hutchinson Triad." Lastly, that dean of them all, Joseph Lister, is remembered for his establishment of the antiseptic principle in the practice of surgery which broadened the scope and lightened the load in every branch of medicine.

And now we turn back to the clinician, back to Guy's Hospital where our ramblings began, to consider Sir William Withey Gull, the nether end of our mid-nineteenth century spectrum. Gull, the son of a wharfinger of Colchester, England, was graduated from the University of London in 1846, and soon thereafter associated himself with Guy's Hospital, where he taught medicine and visited patients for the rest of his life. He was one of the greatest practitioners of his time, Napoleonic in appearance, witty, genial, attractive and a beautiful lecturer. However, popular as he was with students and patients, his later imperiousness and dogmatism nettled the "amour propre" of his confreres and made his professional relations not always happy. He dealt in diseases with the personal equation of the patient and would say, "Never forget that this is not a pneumonia, but a pneumonic man, who is your patient." In his therapeusis, he refused to bow a knee to the Baal of authority and he was a nihilist as regards the drenching with nauseous drugs, a sceptic toward all but a few, with expectant treatment his forte. "The road to medical education" he said "is through the Hunterian Museum, not through the apothecary's shop."

He was among the first to note the posterior

cord lesions in locomotor ataxia, described intermittent hemoglobinuria, myxedema and, with Sutton, the arteriocapillary fibrosis in chronic nephritis, a demonstration that the entity Bright's disease is something more than a local renal affection.

When at seventy-one he had an attack of hemiplegia with aphasia and made a slow recovery, he remarked, "One arrow has missed its mark, but there are more in the quiver." Two years later, a subsequent attack ended a long and useful career, in which he had fulfilled the dictum learned at his mother's knee, a nursery rhyme which to the end of his life he would often quote:

"If I were a tailor, I'd make it my pride,
The best of all tailors to be;
If I were a tinker, no tinker beside
Should mend an old kettle like me."

On a tablet to his memory in the chapel at Guy's are these words:

"As a teacher, few have exceeded him in the depth and accuracy of his knowledge, in the lucidity and terseness of his language and in the effect produced upon his hearers; as a physician, his almost instinctive insight, his unwearied patience, his exact method and ready resources and above all that hearty sympathy which seemed concentrated for the time on each patient, placed him in the highest rank in the noble band of British physicians."

These, then, are the historical facts offered in refutation of the pessimistic fictionalism quoted in an earlier paragraph of this discussion. Of true scientists, in the accepted sense of the word, in what we now broadly call the specialty of internal medicine, there were, to be sure, but few. But as outstanding observers and physicians in the highest sense, each of whom contributed his tithe to the sum total of useful medical knowledge and progress, I doubt whether any like period can show a group superior to those in that half century from Lydgate to Eliot, from Bright to Gull.

Cancer is diagnosed and treated as a co-operative effort in which the patient and the medical profession are closely related allies.

* * *

Cancer in plants can be produced regularly by treatment of plant tissue with plant growth hormones, such as indol acetic acid.

* * *

There is a distant chemical relationship between steroid hormones and the constituents of tar which cause cancer in animals.

* * *

Cancer tends to occur in those structures of the body which are known to be affected strongly by the steroid hormones, especially the tissues of the secondary sexual characters, breast, uterus, and prostate.

Severe Urticaria and Angio-Edema Resulting from Phenylbutazone (Butazolidin®)

By Samuel J. Levin, M.D.
Detroit, Michigan

THE INTRODUCTION of a new drug is frequently followed by reports of undesirable side effects, instances of toxicity and allergic reactions. Such is true in the case of Butazolidin®, a recent addition to the drugs used in the treatment of arthritis.⁴ Several reports^{3,4,5,6} indicate that a significant percentage of toxic reactions occur with this material. Several instances of agranulocytosis,^{1,7} one case terminating fatally,² have been reported. The following case, we believe, is the first to be reported of severe urticaria and angio-edema resulting from the use of this drug.

Report of Case

Case 1.—The patient was a white man, aged twenty-four, who was hospitalized because of severe urticaria and angio-edema. These symptoms began two months before while receiving Butazolidin® for treatment of arthritis. His physician discontinued the drug and oral cortisone therapy was instituted. Several courses were given (exact dosage unknown). Moderate improvement resulted but the urticaria and angio-edema re-occurred with great severity each time the cortisone was discontinued.

When first seen two months after the onset of urticaria he was in severe distress despite treatment with many antihistaminics, other general measures and several courses of oral cortisone. The pruritus was of such severity that despite heavy sedation he had been unable to sleep for many nights. There was very widespread giant urticaria. His lips and eyelids were markedly edematous. Otherwise, physical, hematological and other examinations revealed no abnormalities. Repository adrenocorticotrophic hormone (HP ACTHAR Gel®) was administered as follows: 60 units twice a day the first two days; 60 units once a day on third and fourth days, and 40 units on the fifth and sixth days.

The symptoms cleared up completely by the fifth day and several months later had not recurred.

(Continued on Page 1237)

From the Department of Medicine, Woman's Hospital, Detroit, Michigan.

Read at Annual Meeting of The Michigan Clinical Institute, Detroit, Michigan, March 13, 1953.

St. Luke's Hospital Clinico-Pathologic Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan

Clinical Record

The patient was a white man, thirty-eight years old, who was well until five months before entering the hospital. At that time, he stated that he became "stomach conscious" because of a vague sensation of indigestion. This complaint continued for three months when pain developed in the mid-abdomen. The pain tended to be constant and was of moderate severity and "gnawing" character, and occasionally radiated through the abdomen to the back. There was no relation of severity to ingestion of food at the onset. Later, the pain became sharply localized in the mid-epigastrum and increased severity was noted one to two hours after meals. Relief was then obtained by eating, by taking antacid tablets, and by drinking milk. Radiographic examination elsewhere was stated to reveal an ulcer of the duodenum. The patient was treated with special diet for the next three weeks and there was no relief.

The patient was then admitted to St. Luke's Hospital for radiographic studies. The chest x-ray was normal. With the swallowing of Barium, the esophagus appeared normal and the stomach revealed a coarse and irregular mucosa, most marked in the distal third. Fluoroscopic examination revealed all palpable areas to be flexible and no interruption of peristaltic waves was seen. However, a collection of Barium, 6 mm. in diameter, was identified on the lesser curvature, just beyond the angularis incisura. This was interpreted as a superficial ulcer crater, and was stated to be apparently benign. There was no delay of gastroduodenal evacuation, no deformity of the duodenal bulb, and no gastric retention after five hours.

The patient was given Banthine and a Sippy diet for two weeks in the hospital, and then for two weeks at home. Radiographic re-examination of the stomach was then undertaken. It was noted that the ulcer had slightly enlarged and now appeared to measure 1 cm. in diameter. In addition, there was evidence of excess tissue on either side of the lesion indicating some extension into the lumen. It was stated that serious consideration should be given to the possibility that the lesion be malignant.

One week later, the patient entered the hospital. The symptoms had continued except for the two days before admission when the patient felt well. During the entire illness, there had been no nausea, vomiting, change in color of the stool, or noticeable reduction of appetite. However, during the three months before admission, there had been a weight loss of eighteen to twenty pounds.

The past history and review of systems were not contributory. There had been no known gastric disease in other members of the patient's family.

Physical examination revealed a well-developed and well-nourished white man of thirty-eight years in no distress. The oral temperature was 99.2° F., respirations 20, pulse 86, and blood pressure 177/98 mm. Hg. The head and neck were not remarkable. The thyroid was not enlarged and there was no enlargement of cervical or supraclavicular lymph nodes. The chest was symmetrical and the lungs were clear to auscultation and percussion. Examination of the heart revealed a normal sinus rhythm and no murmurs or enlargement. The abdomen was flat and soft. Palpation revealed slight tenderness in the mid-epigastrum. There were no masses

and the liver, spleen, and kidneys were not felt. The genitalia and extremities were not remarkable.

Hematologic examination revealed 14 gm. of hemoglobin per 100 cc. of blood. There were 4,580,000 erythrocytes and 5,600 leukocytes per cu. mm. Differential count of 100 cells revealed 59 segmented granulocytes, 35 lymphocytes, 4 eosinophils, and 2 monocytes. An operation was performed on the second hospital day.

Discussion

DR. H. M. BISHOP: We have here a rather clear clinical record that indicates a single lesion in the stomach of a relatively young man. The features of interest include a state of well being until five months before operation, and then a steadily progressive illness characterized by pain, weight loss, and radiographic evidence of a mucosal lesion of the gastric wall. The pain was first described as being in the mid-abdomen, and then specifically in the mid-epigastrum and of focal nature, with occasional radiation to the back. In at least one instance, the pain was described as "gnawing" in character. It is also stated that some relief was obtained by the ingestion of food, and that this relief occurred from one to two hours after eating. However, the period during which relief was so obtained appears from the record to be only temporary, and it is to be emphasized that the essential feature of the pain was its constancy. Furthermore, the pain persists during and after treatment with Banthine and a Sippy diet.

The second feature of interest is the rather pronounced loss of weight during this short illness of only five months' duration. There was apparently no particular reduction of appetite and I shall assume from this that the loss of weight represents the systemic effect of a progressive lesion. I should like also to comment here that the absence of anemia in the presence of this constant pain and marked loss of weight further attests to the rapidity with which this lesion progresses. I must say that the combination of all of these factors must have given this patient's physician considerable concern.

In the face of these serious clinical signs, I would expect the radiographic studies to clearly demonstrate a large lesion of the gastric wall. Instead of this, we find only a small mucosal defect that at no time exceeded 1 cm. in diameter. The wall is flexible, there is no interruption of peristalsis, no stenosis in the pyloric region, and no distortion of contour except for this surprisingly small mucosal defect. There does indeed seem to be discrepancy between the paucity of roentgenographic findings and the rapid progression of grave clinical signs.

I believe it is apparent from this clinical record that the main evaluation must be the differentiation of ulcer from malignant neoplasms of the stomach. Several features of this illness are suggestive of peptic ulcer. The lesion appears to be located in the distal third of the gastric wall on the lesser curvature. It is, of course, in this region that peptic ulcer is particularly common. The x-ray studies disclose only a small and constant mucosal niche in a flexible wall that appears otherwise not unusual. At one time, relief of pain was obtained by the ingestion of food and antacid substances. It has been frequently said that with duodenal ulcer, there is

CLINICO-PATHOLOGIC CONFERENCE—SMITH

after the ingestion of food, relief that is followed by pain. In contrast, the ingestion of food in the case of gastric ulcer is followed by pain after which there is relief. In both cases, these cycles recur with extraordinary regularity. The clinical record of this man manifests such a cycle, with pain coming on as soon as one hour after the ingestion of food. I must add, however, that in my experience, this so-called dictum has not proved reliable. The pain was stated to be of "gnawing" character and was occasionally referred to the back. Extension of gastric ulcer through the wall with fixation onto pancreas and involvement of para-pancreatic nerves often accounts for such pain. In this case, fixation was not demonstrated, and it is to be emphasized that involvement of nerves in the wall of the stomach by an ulcer may also produce referral of pain to the back.

Now, although all of these considerations may be held in support of a diagnosis of ulcer, there are several characteristic historical data that are missing. These include a history of gastric distress prior to the onset of this illness five months ago. Most patients with ulcer who are as seriously sick as this man, have clinical disturbances of several years' duration. Furthermore, the usual manifestation of ulcer is pain that is not only of long duration, but is also of distinctly cyclic nature throughout its course. Lastly, a loss of twenty pounds of weight in a period of five months is most unusual in an ulcer patient unless there is a high degree of pyloric stenosis. Therefore, I shall dismiss peptic ulcer as the most likely diagnosis in this case.

Even though the patient is only thirty-eight years of age, and even though the gastric lesion appears to be small on the x-rays, there are several facets of this illness that are most suggestive of malignant gastric neoplasm. I am struck first with the constancy of this pain that persists even through periods of careful dietary management. There is also the pronounced loss of weight in the absence of anorexia and stenosis of the pylorus. These serious complaints arise rather abruptly in a young man who has been previously well. It may be assumed that there has not yet been time for the development of anemia, and its absence does not strongly militate against the diagnosis of malignancy. The small size of the lesion on the x-rays, and particularly the unaltered flexibility of the gastric wall cause me to hesitate. However, we are looking at shadows, not tissue, and the lesion may be considerably larger than our interpretation indicates. For these reasons, I do not believe that the relatively young age of the patient, the absence of anemia, or the small size of the lesion as demonstrated by x-rays, necessarily cast disfavor on the diagnosis of malignant tumor of the stomach. Thus, on the basis of a demonstrated gastric lesion associated with constant pain and with relentlessly progressive loss of weight, of short duration, arising in a previously well patient, I shall make the diagnosis of primary malignant tumor of the stomach.

Malignant lesions of the stomach may be roughly divided into carcinomas and sarcomas. It is, of course, well known that sarcomas tend to occur in a younger age group than the epithelial tumors. Most mesothelial

tumors of the stomach are lymphosarcomas. Hodgkin's disease and reticulum cell sarcoma are less common. On the basis of the age of this patient, I am very much tempted to make a diagnosis of gastric sarcoma. How-

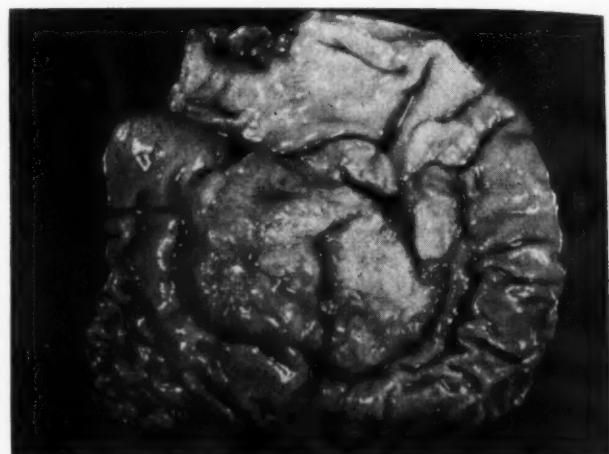


Fig. 1. Stomach showing ulcerated reticulum cell sarcoma.

ever, holding to the factor of statistical safety which strongly favors the malignant epithelial tumors, I shall make the specific diagnosis of adenocarcinoma of the stomach.

DR. J. C. SMITH: After studying this patient with a variety of radiographic techniques, Dr. Caumartin, does your opinion coincide with that of Dr. Bishop?

DR. H. T. CAUMARTIN: Yes, it does. I was also impressed by the disparity between the clinical and roentgenographic findings. Ordinarily, there is better correlation between these factors. There is one feature that should be mentioned. Peptic ulcers that are subjected to strict dietary treatment characteristically change within a short period, so that the crater may disappear after as little as two weeks. This, of course, does not hold for carcinoma. I attach significance to this observation and from it derive support for a diagnosis of malignant tumor in this patient.

Clinical Diagnosis Of Dr. Bishop

Adenocarcinoma of stomach.

Anatomic Diagnoses

Reticulum cell sarcoma of stomach.

Lymph nodes, no pathologic diagnosis (11 of 11 sections).

DR. J. C. SMITH: The specimen consisted of a stomach in which a large ulcerated and raised lesion of roughly round outline replaced the entire wall. This tumor measured 6 cm. in greatest diameter (Fig. 1). The cut surface was firm and uniformly pale pinkish gray. Sections disclosed large cells with abundant cytoplasm and large moderately basophilic, round nuclei with chromatin dispersed in coarse clumps (Fig. 2).

CLINICO-PATHOLOGIC CONFERENCE—SMITH

Mitotic figures were scarce. Special stains demonstrated an abundance of reticulum fibers closely associated with the tumor cells. Secondary tumor was not identified in eleven sections of regional lymph nodes.

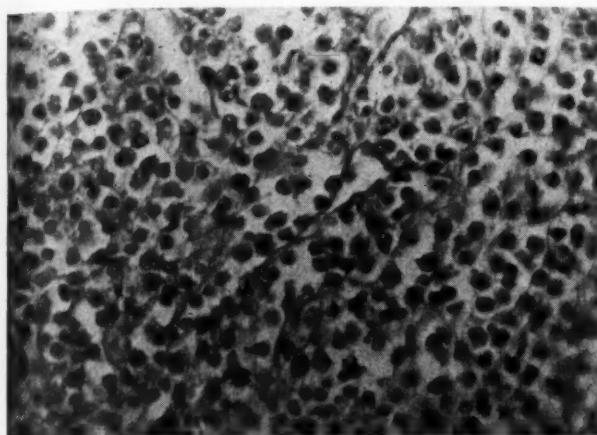


Fig. 2. Microsection of reticulum cell sarcoma.

Some authorities hold that reticulum cell sarcoma is but one type of lymphosarcoma. Others believe that this neoplasm is separate and apart from the group of tumors known collectively as lymphosarcoma. Jackson and Parker¹ hold to the latter view for several reasons.

These include morphologically distinct cells forming the reticulum cell sarcoma, close association of cells with an abundance of delicate reticulum fibrils, and the fact that reticulum cell sarcoma arises in bone as a primary tumor whereas lymphosarcoma does not. They also point out that leukemia, and occurrence under the age of twenty years, are not seen in reticulum cell sarcoma.

In an analysis of twenty-eight cases with autopsy, it was found that the most common primary site was in retroperitoneal lymph nodes, and the next most common site was the gastrointestinal tract. More reticulum cell sarcomas arose in the stomach than from any other portion of the gastrointestinal tract. A tabulation of ninety-eight cases revealed the most frequent signs and symptoms to include loss of weight, pain, anorexia, dyspnea, and cough. Accurate diagnosis depends on biopsy. Jackson and Parker¹ emphasize that treatment consists, for the most part, in the use of high voltage x-rays. In eighty-eight cases, forty-six lived less than one year from onset, thirty-six between one and five years, five from five to ten years, and only one was alive after ten years. Thus, the outlook for these cases is exceedingly poor.

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HYPERTHYROIDISM

(Continued from Page 1193)

thyroidism in the absence of serious complications in patients with relatively low basal metabolic rate (plus 35 or less).

The antithyroid drugs are an important contribution to hyperthyroid therapy in that bad risk patients with high basal metabolic rate, cardiac and other complicating diseases may be made euthyroid before resection of the gland is undertaken. The mortality may thereby be reduced to less than 1 per cent in these patients.

Radio-active isotopes (I^{131}) are ideal in patients with diffuse toxic goiter, recurrent hyperthyroidism and in hyperplastic goiter which fails to respond to other methods of treatment. Because of the possible carcinogenic effect, this type of treatment should be limited, at the present time, to older patients, and to patients of any age in whom the risk of operation outweighs that of the possible chance of cancer. The high dosage necessary in toxic nodular goiters and the failure of the isotope to reduce the size of the gland importantly, limits its value in this type of hyperthyroidism.

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Michigan State Medical Society Past Presidents 1894-1902



More than half of Michigan's population still lived on the farm in 1894-1902, but her cities were growing. Winter wheat was the leading grain crop, using some 1,750,000 acres—more than twice today's acreage.

Entering the wondrous Twentieth Century, Michigan was amazed that the Olds Motor Works in Lansing could produce 1,400 automobiles in one year. Detroit, while proud of its first mile of cement highway, paid little attention to a young mechanic named Henry Ford who dreamed of organizing his own automobile company. And, besides, who wanted to bother with gas buggies when Detroit had a new American League baseball club?

The fact that almost 10,000 students were enrolled in Michigan colleges caused comment, but the Spanish-American War was much bigger news. Michigan supplied five regiments, forcing a re-organization of her National Guard in 1900. That same war produced a vigorous hero who became Vice President in March, 1901, and President six months later when McKinley was assassinated: The First Roosevelt Era was at hand.

(MSMS past presidents from 1903 to 1911 will be featured in an early issue.)

High Point of the Society Year

The Eighty-Eighth Annual Session of the Michigan State Medical Society was larger in attendance (3,266) than any held previously in Grand Rapids. Our Society was honored by having as guests the president of the AMA, Edward J. McCormick, M.D., the senior senator from Michigan, Homer Ferguson, and his wife, Mrs. Ferguson. Both men gave addresses on Officers' Night.

Several of our neighboring states were represented by members of their official families: Paul A. Davis, M.D., Akron, president of the Ohio State Medical Society and Mrs. Davis; Arkell M. Vaughn, M.D., Chicago, president-elect of the Illinois State Medical Society; W. K. Howard, M.D., Hammond, president-elect, and James Waggoner, Indianapolis, executive secretary, of the Indiana State Medical Society. Glenn Sawyer, M.D., Toronto, secretary of the Ontario Medical Society, and Earl Thayer, Madison, executive director of public information, of the Medical Society of the State of Wisconsin, were welcome guests. U. R. Bryner, M.D., of Salt Lake City, Utah, president of the American Academy of General Practice, also honored us by his presence in Grand Rapids.

The House of Delegates met morning, afternoon, and evening, Monday and Tuesday and completed a great deal of work. Several knotty problems were discussed and settled in a satisfactory manner.

Wednesday, Thursday, and Friday were devoted to scientific programs, and all branches of medicine were represented by outstanding speakers.

Our Woman's Auxiliary was well represented at its own annual convention. Mrs. W. S. Stinson of Bay City was installed as president, Mrs. William Mackersie, Detroit, retiring after a successful year. The Woman's Auxiliary continues to be a great help.

The Michigan State Medical Assistants Society had a very successful meeting.

Those of you who were in Grand Rapids will agree that the exhibitors outdid any of their previous efforts in the beauty and interest of the 149 displays.

Credit is due the Press Relations Committee and our public relations counsel, Mr. Hugh W. Brenneman and his associates for the good newspaper and television coverage given the 1953 session.

Last, but not least, recognition should be given to Executive Director William J. Burns and his efficient and devoted staff for the smooth and efficient manner in which the convention was run. A vast amount of work and untold attention to detail are necessarily incurred in such a large undertaking. Thanks are here given to the executive office staff for its part in making the Eighty-Eighth Annual Session a memorable success.

S. W. Hulff

President, Michigan State Medical Society

President's



Message

Editorial

THE FEDERAL CONGRESS

FOR THE FIRST TIME in many years (is it twenty?), the Federal Congress is not in session in Washington! Many of the Senators and Representatives are at home doing the traditional "looking after their fences." During these Congressional "vacations," the men like to and should consult with their constituents who have suggestions to make or criticisms on the way the world is running. We know from personal experience that the Congressmen are willing and eager to talk with the home people not only about matters in general, but also about the specific things these people are interested in, so far as national legislation is concerned.

While the members of Congress are home, it is a wonderful time to invite them to our county and district medical meetings—even the staff conferences of our hospitals, if we could promise a good attendance. There are many topics upon which they could make interesting reports; and they would be glad to have the opportunity. Such a report furnishes information upon which to base an intimate talk with the lawmaker who must produce the legislation in which we are especially interested, or block certain legislative programs which we think are harmful. Each individual doctor of medicine probably has some pet program which he could sponsor, if given the opportunity. If you do not know your Congressman personally, a group meeting is a grand place to ask questions or make suggestions.

In the recent months, we have mentioned several national legislative needs, any or all of which are worthy of action. This season is the first time for as long as we can remember when such a chance for personal conferences has been presented. We urge every medical group and the individual members to speak up. The men from Washington will listen and will be glad to. Sometimes they will even promise to attempt to do something definite, especially when that something is not a selfish project but is a constructive benefit to the whole people.

THE PRESIDENT-ELECT

AT THE Eighty-Eighth Annual Session of the Michigan State Medical Society, held in Grand Rapids, September 21 to 25, 1953, the House of Delegates chose as our President-Elect,



R. H. BAKER, M.D.

Robert H. Baker, M.D., of Pontiac, Michigan. Dr. Baker was born in Bay City, April 10, 1892. His father was Charles H. Baker, M.D., a Councilor and President of the Michigan State Medical Society in 1919.

As a matter of historical interest to our members, this is the fifth time a son has followed his father as President of the Michigan State Medical Society. His predecessors were C. M. Stockwell, M.D., Port Huron, the first President in 1866, and his son Charles B. Stockwell, M.D., also of Port Huron, President in 1906; Richard Inglis, M.D., of Detroit, President in 1869, and his son, David Inglis, M.D., Detroit, President in 1905; Leartus Connor, M.D., of Detroit, President in 1901, and his son, Guy L. Connor, M.D., President in 1925; J. H. Carstens, M.D., Detroit, President in 1909, and his son, Henry R. Carstens, M.D., President in 1941.

Dr. Baker was graduated from the Bay City High School and entered the University of Michigan at seventeen. He received the A.B. degree in 1913 and M.D. in 1918. He was on Dr. A. S. Warthin's pathology staff and was elected to Sigma Xi in his senior year. He served a rotating surgical internship at the University Hospital in 1916-1917, and was demonstrator in Surgery in 1917-1918. He was commissioned First Lieutenant in the Medical Corps, U.S.A., February 1, 1918, and attended the Army Medical School in Washington, March 1 to June 30, 1918, graduating in orthopedic surgery.

In May, 1919, Dr. Baker returned to the University Hospital as instructor in surgery and completed his graduate training in surgery, July 1, 1920. He then entered private practice in Pontiac, specializing in general surgery.

EDITORIAL

Dr. Baker was active in organizing the medical staff at Pontiac General Hospital. He also served on the building committee resulting in the present structure. Dr. Baker served the Oakland County Medical Society as secretary, treasurer, and president. He also served on the Executive Committee and for some years on the Medical-Legal and Economic Committees. He was a charter member of the Kiwanis Club and Torch Club, having served as President of Torch.

Dr. Baker has been a life Fellow of the American College of Surgeons since 1927. He has been repeatedly a Delegate from Oakland County Medical Society to the House of Delegates of the Michigan State Medical Society, Vice Speaker three years, and Speaker four years.

In 1918, Dr. Baker married Helen C. Crane, R.N. They have two children, Donald and Gail, both married. There are four grand-daughters. Dr. Baker's hobbies are travel, photography, music, home woodshop, sailing, and outdoor sports. He is the author of several scientific papers: "Condyloma of the Bladder," "Treatment of Hare-lip and Cleft Palate," "Cylindroma of the Tongue," and "Compression Fracture of the Spine."

OTHER ELECTIONS

THE HOUSE of Delegates, in addition to choosing a President-Elect and installing L. W. Hull, M.D., of Detroit, as President, chose the following Councilors: Wm. L. LeFevre, M.D., Muskegon, as Councilor of the Eleventh District, succeeding Charles A. Paukstis, M.D., Benj. T. Montgomery, M.D., Sault Ste. Marie, Councilor of the Twelfth District to succeed A. H. Miller, M.D.; William S. Jones, M.D., Menominee, to succeed himself as Councilor of the Thirteenth District; and W. B. Harm, M.D., of Detroit to succeed himself as Councilor of the Seventeenth District.

William M. LeFevre, M.D.

William M. LeFevre, M.D., of Muskegon, was elected Councilor for the Eleventh District of the Michigan State Medical Society. Dr. LeFevre was born in Muskegon December 5, 1896, the son of a physician, a former Councilor and President of the Michigan State Medical Society. He was graduated from the University of Michigan, A.B., 1919, and M.D., 1923, interned in the Memorial Hospital, Philadelphia, 1923-24. Since 1924, he has been in the private practice of internal medi-

cine in his present office, 189 W. Western, Muskegon; is a Fellow of the American College of Physicians, 1930; American Diabetes Association, 1941; Michigan Diabetes Association, President since 1950. He was President of the Muskegon



W.M. M. LEFEVRE, M.D.



B. T. MONTGOMERY, M.D.

County Medical Society in 1944, and Secretary from 1945 to 1952. Fraternally, Dr. LeFevre is a member of the Century Club, the B.P.O.E. and the Muskegon Country Club. He is a member of the Red Cross, and was chairman of the Muskegon chapter, 1941-1949.

Dr. LeFevre is a consultant in the Department of Internal Medicine, to both Hackley and Mercy Hospitals; has taken postgraduate courses at the University of Michigan, Barnes Hospital, Massachusetts General Hospital, Cook County, and short courses. He has published five scientific papers, several in THE JOURNAL MSMS, and one pamphlet on "Instructions for the Diabetic Patient."

Benjamin T. Montgomery, M.D.

Benjamin T. Montgomery, M.D., was born in Flint, Michigan, April 24, 1895, studied at the University of Michigan 1914 to 1916, and graduated at Wayne University, M.D. in 1923. He interned at Staines Hospital in 1923-1924, practiced in Detroit 1926-1927, and has practiced at Sault Ste. Marie since 1927. He was President of the Chippewa County Medical Society in 1941, a delegate to the Michigan State Medical Society, 1943-1953, President of the Upper Peninsula Medical Society in 1947 and is a member of the American Medical Association. He is a member of all Masonic bodies including the Knights Templar and Consistories, and is now President of the Sault Shrine Club. Dr. Montgomery, a staff member of the War Hemorial Hospital at the Sault, was Chief of Staff in 1941. He was elected as

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Councilor of the Twelfth District of the Michigan State Medical Society at Grand Rapids.

J. E. Livesay, M.D., Flint, was elected Speaker of MSMS House of Delegates, and Kenneth H. Johnson, M.D., of Lansing, Vice Speaker.



J. E. LIVESAY, M.D.



K. H. JOHNSON, M.D.

Jackson Edward Livesay, M.D.

Jackson E. Livesay, M.D., newly elected Speaker of the House of Delegates, practices at Flint, Michigan. He was born in Montana, January 13, 1914, and received his early education there. He received his B.A. degree at Cornell College (Iowa), and his M.D. degree at the University of Iowa, 1938. He interned at Hurley Hospital, Flint, Michigan, took his residency at Hurley and Jefferson Medical College in Philadelphia, and post-graduate work at the University of Michigan and at Jefferson. He is an Elk, a member of the Chamber of Commerce and of the Mott Foundation. His practice is limited to radiology. He is radiologist to St. Joseph Hospital, Flint, and consultant at A. C. Spark Plug Hospital, Flint.

Kenneth Holbrook Johnson, M.D.

Kenneth Holbrook Johnson, M.D., of Lansing, Michigan, was elected Vice Speaker of the House of Delegates. He was born in Lansing, July 16, 1908, attended Michigan State College two years, and graduated in Medicine at the University of Michigan in 1930. He interned and had his residency at Edw. W. Sparrow Hospital in Lansing. He served in the Air Corps, from May 15, 1942, to November, 1945, and overseas in Australia and New Guinea. He was a Captain and Flight Surgeon with a special rating as radiologist. He is a member of the Lions Club, Chamber of Commerce, has served on the Board of the Family Service Agency and on several committees of the Michigan State Medical Society.

Wm. A. Hyland, M.D., of Grand Rapids, Ralph A. Johnson, M.D., of Detroit, and J. S. DeTar, M.D., of Milan, were elected to succeed themselves in the House of Delegates of the American Medical Association. Alternate delegates elected were Geo. W. Slagle, M.D., Battle Creek; Warren W. Babcock, M.D., Detroit; and O. J. Johnson, M.D., of Bay City.

The Council, at its organizational meeting, Friday, September 25, 1953, re-elected William Bromme, M.D., Detroit, as Chairman; H. B. Zemmer, M.D., Lapeer, was re-elected Vice Chairman; W. S. Jones, M.D., Menominee, Chairman of the Finance Committee; D. Bruce Wiley, M.D., Utica, Chairman of County Societies Committee; and G. B. Saltenstall, M.D., Charlevoix, Chairman of the Publication Committee.

MICHIGAN MEDICAL SERVICE DIRECTORS

THE MEMBERS of Michigan Medical Service elected the following Directors: (*For three years*) L. Fernald Foster, M.D., Bay City; Ralph N. Long, Detroit; William A. Hyland, M.D., Grand Rapids; W. H. Huron, M.D., Iron Mountain; Grover C. Penberthy, M.D., Detroit; Ellery A. Oakes, M.D., Manistee; Philip Riley, M.D., Jackson, D. W. Thorup, M.D., Benton Harbor; James B. Blodgett, M.D., Detroit. (*For two years*) Geo. W. Slagle, M.D., Battle Creek; Ralph A. Johnson, M.D., Detroit. (*For one year*) Joseph P. Peer, M.D., St. Clair; and D. Bruce Wiley, M.D., Utica. Also elected to represent Michigan Hospital Association were: Kenneth B. Babcock, M.D., Detroit, and A. C. Kerlikowske, M.D., Ann Arbor.

A PROBLEM FOR MICHIGAN PHYSICIANS

THE ANNUAL problem of obtaining a sufficient number of well-qualified young physicians to fill the vacancies available in Michigan hospitals approved for intern and resident training is of great importance to the medical profession of our State.

The State that fails to attract and hold its quota of interns and residents is soon faced with a shortage of physicians capable of bringing modern medicine to its people. Cultists and those with

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inadequate training rush in to fill the medical needs of the people.

Michigan has thirty-four hospitals approved for intern and resident training. These institutions have 555 internships to be filled each year. Hospitals that are a part of, or affiliated with, medical schools have little trouble in obtaining a sufficient number of promising interns and residents, but those not connected with teaching institutions are not so fortunate. The successful operation of an intern and resident training program in these institutions is complicated by many factors: The hospital staff is loosely integrated and made up of many competing physicians. Each physician is an individualist in his method of treating the sick. The practices which have served him well for years are difficult to discard and habit often determines his methods of procedure.

The patients receiving medical care in hospitals today are classified for the most part as private patients. Each has his or her own physician. Both the patient and the attending physician at times resent necessary laboratory procedures and other services by interns and residents, nurses and laboratory assistants. Long before the attending physician has accepted the intern or resident as a working partner in his hospital practice, his patients usually are pleased with the young physician's services. They find that they have two physicians in attendance and loudly praise the care they are receiving.

The intern is smart. When he begins his service in the hospital approved for intern training he knows more about medicine than he will ever know again in his professional life. He is filled with scientific knowledge pertaining to medicine, but he usually is totally deficient in knowledge of the art of practice. He is outspoken, critical, and sure of his ability. Occasionally, by some unknown process of cerebration, he will arrive at a correct diagnosis and greatly irritate and embarrass the attending physician. He will inform everyone that his medical school is superior to all others, and that its faculty is composed of the greatest teachers in the country. The methods of treatment taught in his school are the only modern ones. These things endear him to the hospital staff members and to the group of interns and residents from other schools! (This description of an intern would accurately describe most of us when we first embarked upon our graduate training.)

In spite of many points of friction between the intern and the attending physician, it is possible to establish and maintain a good intern and resident training program in most of our hospitals approved for this important work. But in order to do so the physician must sacrifice some of his time from his busy practice. Daily hospital visits should be made by the attending physician accompanied by the interns and residents. The tentative diagnosis, the physical condition of the patient, previous and present treatments, prognosis and plan of procedure in the care of the patient should be discussed fully and frankly with the young physicians. These discussions, of course, should not be held in the presence of patients.

Within a short time a mutual understanding as to each physician's duties will be established, as well as mutual respect for each other. If the intern and resident feel that they are profiting by the experience of the older physician, they, usually, are very willing to serve the patients.

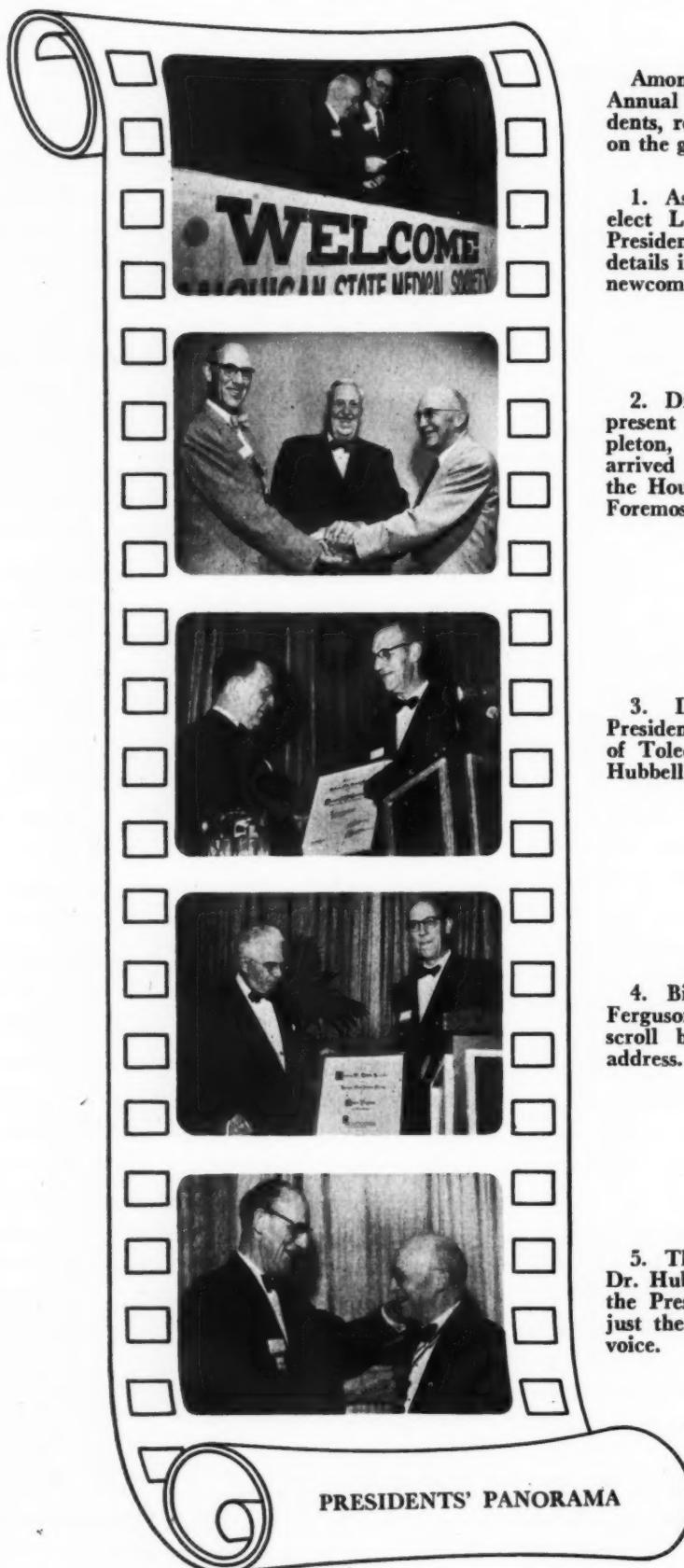
In some hospitals in our State the educational program is directed by members of a committee on intern and resident training. There can be no objection to such a committee, but every physician practicing in a hospital has some contribution to make in the training of these young men and women. Some can give much more than others, but the *esprit de corps* is much better when each physician is contributing something to the training program.

Michigan doctors in the thirty-five hospitals in this State approved for intern and resident training have an opportunity to help young physicians in their graduate work. The attending physician will be a better medical servant if he comes in contact daily with these young interns and residents. His medical care of patients in the hospital will improve and he will establish friendships with many young physicians who later will be his colleagues. The hospitals will be benefited by rendering a better quality of service to the sick, and the patients will be most grateful to their attending physician and the graduate staff for excellent service during their stay in the hospital.

H. H. CUMMINGS, M.D.

Chairman, Committee on Postgraduate Medical Education, MSMS

MSMS IN THE SPOTLIGHT



Among the busiest men at the 88th Annual Session were the MSMS Presidents, retiring and incoming, who were on the go morning to evening.

1. As the session opened, President-elect L. W. Hull, M.D. (left), and President R. J. Hubbell, M.D., checked details in between times as they greeted newcomers on the Pantlind balcony.

2. Dr. Hubbell and Dr. Hull were present to congratulate William J. Stapleton, Jr., M.D. (center), when he arrived from Detroit to be saluted by the House of Delegates as "Michigan's Foremost Family Physician" of 1953.

3. During Officers' Night, AMA President Edward J. McCormick, M.D., of Toledo, received a scroll from Dr. Hubbell after addressing the assembly.

4. Biddle Lecturer, Senator Homer Ferguson, was also presented with a scroll by Dr. Hubbell following his address.

5. Then, his year of service ended, Dr. Hubbell passed his badge of office, the President's Key, to Dr. Hull with just the hint of a sigh of relief in his voice.

88th Annual Session Roundup

NEW ATTENDANCE RECORD FOR GRAND RAPIDS

"Outstanding" was the most-used adjective for the 88th Annual Session. One strong point in evidence was the registration, which totaled 3,266 for the week—a record attendance for Grand Rapids that crowded the all-time high in Detroit last year.

Altogether 1,704 doctors of medicine were present for the three days of scientific presentations by 26 prominent guest essayists from every section of the nation. In addition, M.D.s and their patients and other friends had the opportunity of hearing AMA President Edward J. McCormick, M.D., of Toledo, Ohio, and U. S. Senator Homer Ferguson, who appeared as Biddle Lecturer with an authoritative and up-to-the-minute review of American foreign policy and the role of the United States in world affairs.

ANNUAL SESSIONS "FIRSTS"

Among the "firsts" which appeared in conjunction with the 1953 Annual Session was the first General Practice Day, the first meeting of the Michigan Chapter, American College of Surgeons, the first Beaumont Lecture, and the selection of the first writer to receive the new MSMS Award for Excellence in Medical Reporting.

The first Beaumont Lecture, a memorial to William Beaumont, M.D., the pioneer Michigan physician famed for his research in human digestion, was given by J. A. Bargen, M.D., Rochester, Minnesota, Chief of the Department of Gastroenterology at Mayo Clinic.



A SUCCESSFUL YEAR

William Bromme, M.D. (right), Detroit, Chairman of The Council, MSMS, played a major part in the planning and direction of the successful 88th Annual Session. Here he is pictured in smiling action presenting a scroll and the Past President's Pin of Appreciation to R. J. Hubbell, M.D., on Officers' Night.

Selected by The Council to receive the first in a series of periodic awards for excellence in reporting in the field of medicine was Jack Pickering, *Detroit Times* science writer, who will be presented with a scroll during the 1954 Michigan Clinical Institute next March.

MICHIGAN'S FOREMOST

While Annual Session highpoints were numerous, two events which attracted the greatest public attention were the selection of William J. Staple-

NEW MSMS ATTENDANCE MARK FOR GRAND RAPIDS

Here's a breakdown of the record registration for the 88th Annual Session of MSMS in Grand Rapids September 23-25:

Doctors of Medicine.....	1,704
Woman's Auxiliary Members.....	269
Medical Assistants Members.....	246
Guests (including nurses).....	542
Exhibitors	505
 TOTAL	 3,266

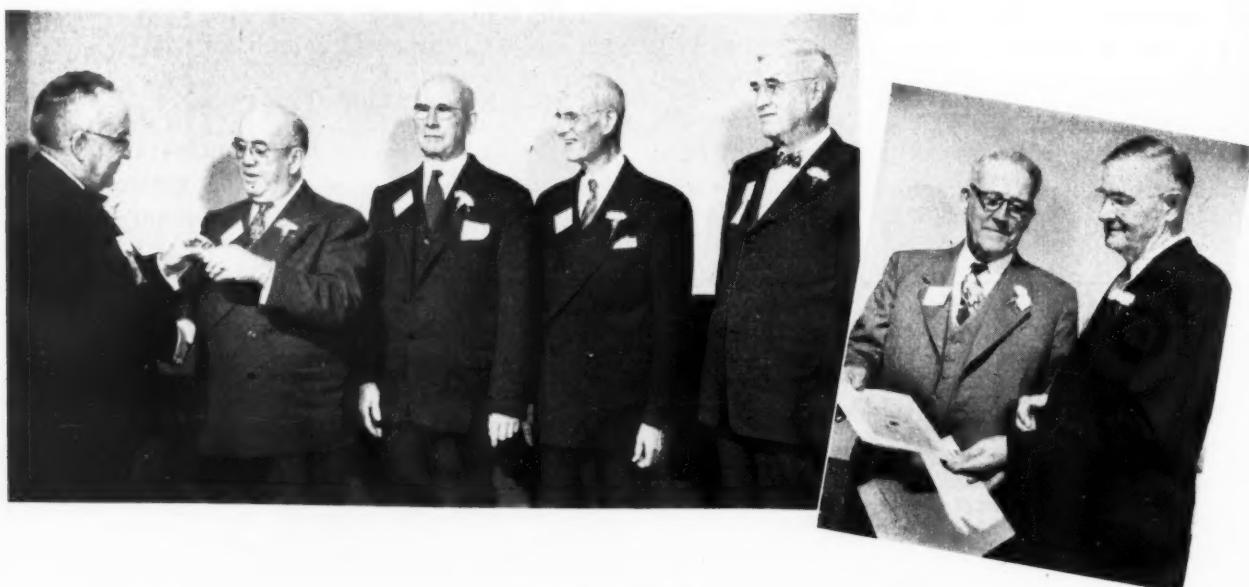
The largest registration in Grand Rapids previously was 2,901 in 1951. The 1953 Grand Rapids attendance crowded the all-time record of 3,605, set at the 1952 Annual Session in Detroit.

88TH ANNUAL SESSION ROUNDUP



HOUSE OF DELEGATES TACKLES PROBLEMS

Discussion and debate on major problems extended far into the night as members of the House of Delegates conducted annual MSMS business. Interest was so intense that two meetings drew 100 per cent attendance, while the record at others was nearly perfect. At the rostrum is Vice-Speaker J. E. Livesay, M.D., Flint, later elected Speaker. Seated to his left is President-elect R. H. Baker, M.D., Pontiac, who was still Speaker when this action photo was taken; Executive Assistant Helen Schulte; Secretary L. Fernald Foster, M.D., Bay City. Introducing a resolution at the microphone (*far left*) is O. K. Engelke, M.D., Ann Arbor. Inserted (*upper right*) is portrait of Dr. Baker.



THE GOLDEN YEARS

Six of the twenty new members of the MSMS "Fifty-Year Club" were present to be honored for reaching the half-century mark in their medical practice. To most the honor was just another milestone in their active daily service to the public. Preparing to receive awards from L. Fernald Foster, M.D. (*left*), Bay City, MSMS Secretary, (*left to right*) are: A. J. DeNike, M.D., Detroit; C. B. Fulkerson, M.D., Kalamazoo; Robert Beatie, M.D., Detroit, and J. D. Brook, M.D., Grandville. Inset shows A. B. Hewes, M.D., Adrian, and W. H. Honor, M.D., Wyandotte, after the ceremony.

88TH ANNUAL SESSION ROUNDUP



MSMS MAKES HEADLINES

In the bustling Press Room, reporters from major newspapers and wire services as well as radio, and television outlets produced thousands of words on the 88th Annual Session. Here Dale Nouse (right), *Detroit Free Press* science writer, interviews Blair Holcomb, M.D., (second from left), Portland, Oregon, guest speaker. Listening are William M. LeFevre, M.D., (left), Muskegon, MSMS Councilor and Dr. Holcomb's host, and P. W. Kniskern, M.D., Grand Rapids, Scientific Press Committee member.



CLUB GETS MEDICAL FACTS

Five Grand Rapids service clubs invited doctors of medicine to speak on current medical topics during the MSMS Annual Session. In addition, MSMS representatives appeared on a number of radio and television programs. Answering questions after a talk before the Exchange Club is Joseph G. Molner, M.D., (right) Detroit Health Commissioner. With him are Carl W. Uthoff, M.D., (left), Grand Rapids, chairman of the Exchange Club program, and Winston G. Prothro, M.D., Director of Grand Rapids City Health Department.

ton, Jr., M.D., Detroit, as Michigan's Foremost Family Physician of 1953 by the House of Delegates, and the admission of twenty doctors of medicine to the MSMS 50-Year Club. Since its inauguration in 1947, the exclusive organization for M.D.s who have reached the half-century mark in medical practice has received 202 members.

Named to 50-Year Club membership in Grand Rapids were the following: Robert Beattie, M.D., Franz Blumenthal, M.D., A. J. DeNike, M.D., John C. Dodds, M.D., B. U. Estabrook, M.D., J. E. Gleason, M.D., Charles W. Knaggs, M.D., Allan McDonald, M.D., W. R. Olmstead, M.D., R. L. Pfeiffer, M.D., and C. E. Simpson, M.D., of De-

troit; Jacob D. Brook, M.D., Grandville; J. E. Cooper, M.D., and J. W. Gething, M.D., of Battle Creek; C. B. Fulkerson, M.D., and F. E. Grant, M.D., of Kalamazoo; W. H. Honor, M.D., Wyandotte; A. B. Hewes, M.D., Adrian; W. E. McNamara, M.D., Lansing; J. E. Munro, M.D., Jackson, and E. L. Thirlby, M.D., Traverse City.

For Grand Rapids, the scientific and technical exhibit also set a record, with 149 displays lining the exhibition hall of the Civic Auditorium. On display at the Pantlind Hotel entrance was the Michigan Epilepsy Center trailer with its electroencephalograph and an attendant and patient for demonstration.

88TH ANNUAL SESSION ROUNDUP



AUXILIARY LEADERS CHAT

Mrs. Leo J. Schaefer (*left*), of Salina, Kansas, President of the AMA Woman's Auxiliary, discussed 1953-54 plans with MSMS Auxiliary leaders before speaking at the women's annual luncheon. With her, left to right, are Mrs. A. E. Milford, Ypsilanti, President-elect; Mrs. William Mackersie, Detroit, immediate Past President, and Mrs. Walter S. Stinson, Bay City, President.

THE PUBLIC WATCHED AND LISTENED

National news teletype trunk lines and national columnists carried news of the MSMS work on a coast-to-coast network. Major Michigan newspapers and wire services sent full time representatives to cover the week-long convention. Television stations in Western Michigan and radio stations over the entire state blanketed Michigan with the message of medicine.

More than ever before the spotlight of public attention focused upon the doctors' doings—even their private actions! Clippings returned indicate that with one exception every daily and weekly newspaper in Michigan carried one or more articles. Both Grand Rapids papers featured front page articles every day and as many as four supplementary articles in each edition. United Press and Associated Press carried daily stories. Even

the pre-convention "hand-out" stories were generously used and the very complete convention press kits were praised by the science writers.

In addition to the inclusion of medical news on the regular news broadcasts, a total of sixteen special radio, television and service club appearances were arranged (see page 1226).

Such was the voice of medicine as it emanated from the interviews with officers and guest lecturers via the busy press room. No guest lecturer completed his duties until his host had shepherded him through the gauntlet of science writers under the watchful eyes of the hard working press committees. Members of the Press Committee of the House of Delegates were: J. E. Livesay, M.D., Flint, Chairman; R. H. Baker, M.D., Pontiac; L. Fernald Foster, M.D., Bay City; H. F. Dibble, M.D., Detroit; R. A. Johnson, M.D., Detroit; C. A. Payne, M.D., Grand Rapids. The Scientific

MORE EXHIBITS—MORE VISITORS

MSMS members had an opportunity to see 149 technical and scientific displays at the 88th Annual Session, the largest number for any MSMS exhibit. Conversely, exhibitors had the chance to meet with the greatest number of MSMS registrants ever to visit Grand Rapids (3,266). There was a constant flow of interested M.D.s through the vast exhibit hall.



88TH ANNUAL SESSION ROUNDUP



200 "Good RIGHT ARMS"

Efficient ladies who make things tick in M.D. offices throughout Michigan also meet concurrently with the MSMS Annual Session. A record turnout of 246 members of the Michigan State Medical Assistants Society registered for their Fourth Annual Convention. Most of them were present for the annual banquet, where this photograph was taken.

Press Relations Committee were: C. A. Payne, M.D., Chairman; Fred Brace, M.D., H. G. Benjamin, M.D., and P. W. Kniskern, M.D., all of Grand Rapids.

GUESTS AND HOSTS

Eighteen related groups and societies, including the Woman's Auxiliary to the MSMS and the Michigan State Medical Assistants Society, met in conjunction with the Annual Session.

The Annual Session attracted special guests from every surrounding state and Canada, including officers and staff members from the medical societies of Ohio, Indiana, Illinois, Wisconsin and Ontario. Among these were Paul A. Davis, M.D., President, Ohio; Arkell M. Vaughan, M.D., President-elect, Illinois; W. H. Howard, M.D., President-elect, and James Waggoner, Executive Secretary, Indiana; Glenn Sawyer, M.D., Executive Secretary, Ontario, and Earl Thayer, Public Relations Director, Wisconsin.

Contributing signalily to the success of the 88th Annual Session were the "ubiquitous hosts"—MSMS members assigned to guest essayists during their stay—who provided hospitality to the visitors and squired them from place to place. Once again, each guest had his individual host, so each distinguished speaker was made to feel "at home."

Special hosts to the guests from Grand Rapids were: H. P. Kooistra, M.D., H. J. Van Duine, M.D., W. H. Steffenson, M.D., J. A. Ryan, M.D., Leon DeVel, M.D., Jerome E. Webber, M.D., R. G. Laird, M.D., A. B. Thompson, M.D., D. B. Davis, M.D., F. L. Doran, M.D., R. H. Denham, M.D., G. D. Albers, M.D., C. A. Payne, M.D., S. M. Wells, Jr., M.D., A. J. Tesseine, M.D., L. P. Ralph, M.D., L. A. Ferguson, M.D., Donald Boersma, M.D., G. G. Stonehouse, M.D., W. L. Bettison, M.D., Wm. Benner, M.D., W. B. Prothro, M.D., W. I. Lillie, M.D., R. H. Meade, Jr., M.D., J. H. Beaton, M.D., R. P. Nanzig, M.D., W. A. Hyland, M.D., J. D. Miller, M.D.

Other hosts were: W. M. LeFevre, M.D., Muskegon; R. J. Hubbell, M.D., Kalamazoo; G. C. Penberthy, M.D., Detroit; Arch Walls, M.D., Detroit; L. W. Hull, M.D., Detroit; H. B. Zemmer, M.D., Lapeer.

Behind the success of the 88th Annual Session was hard work on the part of many MSMS members, committee members, officers, and representatives of the "host" medical society of Kent County.

The usual digest of the Proceedings of the House of Delegates will be published in the December number of *THE JOURNAL MSMS*.

SCHEDULES OF PUBLIC PRESENTATIONS DURING ANNUAL SESSION

Television

Participant	Station	Program	Date
L. Fernald Foster, M.D., Bay City	WOOD-TV	Health of Our City	Sept. 21
L. Paul Ralph, M.D., Grand Rapids			
W. B. Prothro, M.D., Grand Rapids			
Mr. Morris Barrett, Moderator, Grand Rapids			
H. B. Zemmer, M.D., Lapeer	WOOD-TV	Runyon Reporting	Sept. 23
Bob Runyon, News Reporter			
Blair Holcomb, M.D., Portland, Ore.	WOOD-TV	Runyon Reporting	Sept. 24
Bob Runyon, News Reporter			
Crippled Children Exhibit personnel	WOOD-TV	Chit Chat	Sept. 25
Carol DuVall, announcer and reporter			

Radio

Participant	Station	Program	Date
News Reporters	WOOD	News Broadcasts	Sept. 21
	WLAV		
	WJEF		
	WJEF	News Interview	Sept. 22
Leo M. Taran, M.D., Roslyn, N. Y.			
Leon DeVel, M.D., Grand Rapids	WJEF	News Interview	Sept. 23
Mr. Donald Hoyleman, news reporter			
E. J. McCormick, M.D. President	WOOD	Gretchen Lee	Sept. 24
of American Medical Association			
Mr. Donald Hoyleman, news reporter	WOOD	Just Things	Sept. 25
W. J. Stapleton, M.D., Detroit			
Miss Mickey Sager, announcer	WOOD	Gretchen Lee	Sept. 25
Carol DuVall, announcer and			
reporter, describing MSMS exhibits	WOOD		
Leslie N. Gay, M.D., Baltimore, Md.			
Miss Mickey Sager, announcer			

Service Club Talks

Participant	Club	Host
R. L. Novy, M.D., Detroit	Kiwanis	W. R. Vis, M.D., Grand Rapids
J. G. Molner, M.D., Detroit	Exchange	C. W. Uthoff, M.D., Grand Rapids
		Richard Sidell, M.D., Grand Rapids
A. E. Heustis, M.D., Lansing	Lions	H. J. Van Belois, M.D., Grand Rapids
		E. W. Schnoor, M.D., Grand Rapids
L. J. Hirschman, M.D., Traverse City	Rotary	C. B. Beeman, M.D., Grand Rapids
		N. L. Avery, Jr., M.D., Grand Rapids

Newspapers and Wire Service Representatives

Representative	Representative	Service	Service
E. W. Murphy	Burdett Ashley	Grand Rapids Herald	Associated Press
Ros Jensen	Jack Pickering	Grand Rapids Press	Detroit Times
George Zarafonetis	Allen Shoenfield	United Press	Detroit News
Dale Nouse			Detroit Free Press

William J. Stapleton, M. D.

"Michigan's Foremost Family Physician, 1953"

William J. Stapleton, M.D., 76-year-old Detroit general practitioner with a long history of effective medical society activity interwoven through his fifty three years' practice as a doctor of medicine,

been called Detroit's foremost authority on medical history. He is an author of standing—his "By the Way . . ." column in *The Detroit Medical News* being avidly read. For years, his nom de



was chosen Michigan's Foremost Family Physician of 1953 by the House of Delegates at the 88th Annual Session.

He is the first metropolitan physician to be chosen for the honor.

Dr. Stapleton entered practice in Detroit in 1900, following his graduation from Wayne University College of Medicine. He first made house calls on a bicycle, later acquiring a horse and buggy, and then a Model T. But his qualifications as Foremost Family Physician go far beyond the concept of a friendly "horse and buggy doctor" who has devoted fifty-three years to his patients.

He is Past President of the Wayne County Medical Society and of the Detroit Academy of Medicine, and has a long record of committee service in MSMS and in his county society. He has

plume has been "The Medicine Man." In addition to his M.D. degree, he holds degrees in both Pharmacy and Law, and is Former Associate Dean of Wayne University College of Medicine.

On July 1, 1951, he was named Emeritus Professor of Medical Jurisprudence at Wayne University, after thirty-seven-years on the staff.

His organization memberships are numerous.

Most important, he is still wholeheartedly practicing medicine. Detroit newspapermen who rushed to his office when Dr. Stapleton's selection was announced, found the patient came first. They waited in the outer office until Dr. Stapleton had completed his consultations.

A later number of *THE JOURNAL* will carry the story of Michigan's Foremost Family Physician of 1953 in greater detail.

LOOK TO MICHIGAN ---

FOR OPPORTUNITIES IN MEDICINE

(The Michigan Health Council M.D. Placement Project)

OPPORTUNITIES in Medicine do exist in Michigan. This is evidenced in the number of M.D.s who have selected a location and started their practice in various areas of the state during 1953.

Assisting doctors of medicine, interns, residents and medical students to explore these opportunities is one of the major functions of the Michigan Health Council M.D. Placement Project.

A second principal function of the program is to alert the community to its responsibility and to the obligations which the people face if they are to be successful in attracting a doctor.

The Michigan Health Council M.D. Placement Program can be described succinctly as a plan to "FIND LOCATIONS FOR M.D.s and to ASSIST COMMUNITIES TO SECURE M.D.s"

This is a simple pronouncement but to make it work systematically it has been necessary to build a complex program behind it.

The Council of MSMS, recognizing the potential of a state-wide M.D. Placement Program, turned over the project to Michigan Health Council in January 1953.

Accepting it as a new challenge, The Health Council, with the guidance of the MSMS Committee on Rural Medical Service, developed a program which already has placed twelve doctors of medicine and laid the foundation for a comprehensive program, designed to do a total job.

*Cover Photo. Alan D. Dawson, Ypsilanti (left), President Student AMA, University of Michigan Chapter. Jack Ryan, Royal Oak, (right) President, Student AMA, Wayne University Chapter.

DEVELOPMENT

To benefit from the experience of others, MHC made a study of material and information available. This data was gathered by mail and by personal contact with representatives from other states. In attending a regional meeting, held in Memphis, Tenn. and called by AMA, a representative from MHC was able to study the plans of many other states, incorporate their best systems, and integrate them with new ideas developed in the light of Michigan needs.

BROAD COLLABORATION ASSURED

Early in the planning stage it was decided that many interests should be encouraged to participate. Acceptance of this responsibility was enthusiastically received by other groups and working liaison was immediately established with organizations such as: Michigan Basic Science Office, Board of Registration in Medicine, the two Michigan Medical Schools and others listed in another part of this article.

The co-operation and genuine collaboration of all these groups has been an important factor in the success of the project to date.

ALL SOURCES EXPLORED

To make early contact with doctors of medicine, MHC opened all sources of supply and established channels through which these sources will continue to function.

Cultivation of these sources is a continuing process and regular, periodic contacts are being made.

Interns and Residents constitute the largest potential group. Of the 177 June 1953 graduates of

LOOK TO MICHIGAN



Hillman, Michigan, (pop. 400). The size of a town is best measured in "Community Spirit."

Michigan Medical Schools, forty-nine are interning at points outside the state of Michigan and 128 are located at Michigan Hospitals.

Contact has been established with each one of these men with the objective of stimulating his interest in **OPPORTUNITIES IN MICHIGAN**.

There are a total of 524 internships in Michigan hospitals. Many of these are filled by men from other states. A sincere invitation is extended these men to "LOOK TO MICHIGAN" for an opportunity to practice.

Medical Schools—Through the co-operation of A. C. Furstenberg, M.D., Dean of the School of Medicine, University of Michigan, and Dr. Gordon Scott, Dean of Wayne University, College of Medicine, MHC was provided an opportunity to work with the medical students.

Both University of Michigan and Wayne University Medical Schools are co-operating fully in the MHC program. They have assisted in distributing material and stimulating interest in the project among the undergraduates.

Pictured on the cover of this issue of JMSMS are Alan D. Dawson, president, Student AMA chapter at University of Michigan, and Jack Ryan, president, Student AMA chapter at Wayne University.

These young men represent the "future doctors of Michigan." The Michigan Health Council M.D. Placement Project urges them to "LOOK TO MICHIGAN."

Armed Forces—Liaison has been established with the Michigan Volunteer Advisory Committee to the Selective Service System. Through the efforts of Grover C. Penberthy, M.D., chairman of the committee, arrangements were made to provide

MHC the names of doctors of medicine, prior to their termination with the armed forces.

Other States—The MHC program has been announced to other states and a co-operative arrangement has been established for mutual benefit.

AMA makes regular referrals to MHC and provides names of any doctors who apply for information on Michigan opportunities.

PROGRESS RECORDED

During the first few months, the entire MHC staff was utilized to set up the necessary systems and controls. Information was gathered from all possible sources and two basic rosters were prepared, one listing doctors of medicine and the other showing communities seeking the services of a doctor. M.D.s were listed on these rosters as follows:

M.D., age 28, Michigan resident. Married, Protestant, holds Michigan license. Graduate University of Michigan 1952. Internship St. Mary's Hospital, Grand Rapids. Priority 4 classification. Desires small community, 3 to 5,000 population for private practice or will consider associate. Available July 1, 1953. **L W—148**

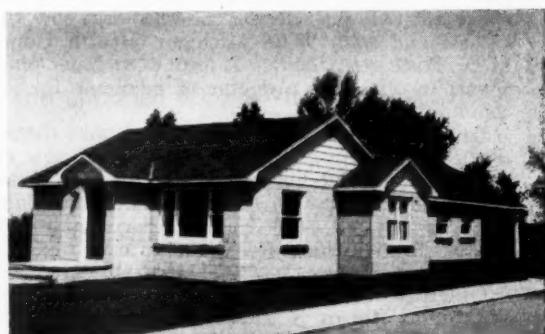
Communities appear on the other roster in the following manner:

SOUTH WEST—Doctor Procurement Committee of this community (trade area of 2,500 plus nearby towns) will fully co-operate with M.D. locating there. Attractive arrangements are available for office space, housing, etc., 13 miles to 60 bed hospital. Three large cities within 40 miles. Rich farm area, accredited school, service clubs, golf, swimming, etc. Dial phones and visiting nurse service available.

P W—176

To date, contact has been established with a total of 105 Michigan communities. Of these, ninety-one remain open on the roster.

A total of sixty-eight doctors of medicine have



This attractive clinic building was financed by public subscription. Residents of three surrounding townships participated.

LOOK TO MICHIGAN

registered with the service. Only thirty-nine remain on our roster at this time.

Twenty-eight Michigan hospitals with staff and residency openings have registered. Our present hospital roster carries twenty-six names.

As of September 1953, the MHC Placement Program has assisted the following doctors in making a decision as to a permanent location.

H. R. Deal, M.D.	Mem. Hosp. Clinic	Van Dyke
I. W. Clay, M.D.	Menominee	
R. E. Pearson, M.D.	Boyne City	
C. G. Kramer, M.D. (Industrial Med.)	Saginaw	
R. W. Lieber, M.D.	Durand	
C. J. Power, M.D.	Woodland	
E. H. Lass, M.D.	Lapeer	
Benjamin Shockley, M.D.	Charlotte	
Roy Quamme, M.D.	Hillman	
J. A. Millard, M.D.	Middleville	
W. C. Peltason, M.D.	Marion	
P. S. Marsa, M.D.	Lake Orion	

Case Studies

Selecting several of the above locations at random, the following "case studies" describe the functioning of the Michigan Health Council M.D. Placement Program.

Boyne City

February 5, 1953. Chamber of Commerce wrote to MSMS describing need.

February 10, 1953. MSMS forwarded inquiry to MHC.

At the welcoming celebration for Roy K. Quamme, M.D., Hillman's new physician, the President of the Michigan Health Council, H. B. Zemmer, M.D., and John R. Rodger, M.D., spoke to more than 300 assembled guests. Dr. Zemmer congratulated the citizens of the area on their success and said, "The Michigan Health Council M.D. Placement Service is proud to have played a part in obtaining a doctor of medicine for your community."

Dr. Rodger, from nearby Bellaire, told the citizens that their responsibility did not end now that Dr. Quamme and his family had arrived. Likening the rural doctor to the volunteer fireman in the area, he pointed out, "your doctor cannot hope to stay in your community if he is called only for medical emergencies."

Others who participated included L. F. Hayes, M.D., and Robert S. Libke, M.D., President and Secretary of the Medical Society of North Central Counties, and E. S. Parmenter, M.D., Director of the Tri-County Health Unit in that area.

SEPTEMBER (1953) PLACEMENTS

Edward F. Kronschnabel, M.D.	Gwinn
C. J. Power, M.D.	Woodland
Raymond Winfield, M.D.	Marlette
Robert H. Hamburg, M.D.	Detroit
Benjamin Shockley, M.D.	Charlotte
R. W. Lieber, M.D.	Durand
Roy W. Hodges, M.D.	Mackinaw City
Roy K. Quamme, M.D.	Hillman
J. R. Gehman, M.D.	Standish

February 18, 1953. MHC established contact with Boyne City.

February 16, 1953. MHC established contact with Robert E. Pearson, M.D., intern at Highland Park General Hospital.

February 23, 1953. Dr. Pearson visited Boyne City and talked with contact persons developed by MHC. Several weeks later Dr. Pearson again visited Boyne City, accompanied by Mrs. Pearson.

The local committee again met them and introduced Mrs. Pearson to key women in the community.

Following this trip Dr. Pearson decided to locate in Boyne City if the community was willing to wait until he finished his internship the following June. MHC urged them to wait for Dr. Pearson, which they did.

Dr. Pearson set up practice in Boyne City in July, 1953.

Woodland

January, 1953. Woodland writes Michigan Board of Registration in Medicine and Governor Williams, who made referral to MSMS.

February, 1953. MSMS refers Woodland's request to Michigan Health Council.

February 25, 1953. MHC refers first doctor to Woodland. Dr. Pearson decided, however, to locate in Boyne City.

May 18, 1953. The names of seven doctors were supplied by the MHC.

June 16, 1953. Dr. Power contacts M.D. Placement Service seeking to relocate. He is referred to Woodland.

July, 1953. Dr. Power expresses interest in Woodland, although he visits several other openings.

July 23, 1953. MHC representatives meet with Woodland Doctor Procurement Committee regarding housing and office arrangements and following this, meet again with Dr. Power.

August, 1953. Dr. Power decides to locate in Woodland beginning September 1 upon completion of remodeling of home-office provided by community at nominal rental fee.

Hillman

April 10, 1952. Hillman Rotary Club contacted MSMS to place advertisement for GP in JMSMS.

December 3, 1952. Hillman advises MHC of organization of Doctor Procurement Committee and construction of clinic building and residence. Ask MHC for assistance in locating GP.

December 9, 1952. MHC acknowledges contact and starts making referrals.

(Continued on Page 1232)

JMSMS

Medical Coverage for Michigan

In 1950 there were 6,937 physicians in Michigan, providing in Michigan a ratio of one physician for every 919 persons. The national existing ratio was one physician for every 749 persons at that time.

Of the above 6,937 Michigan physicians, 2,663 were actively engaged in private practice in the eighty-two counties of the state outside of Wayne County, providing a ratio in these eighty-two counties of one physician for every 1,456 persons, or approximately one-half as many physicians for the people of Michigan outside of Wayne County as the national average.

Between the years of 1940 and 1949, the University of Michigan Medical School and Wayne University College of Medicine graduated 1900 doctors. During the same period, the State Board of Registration in Medicine approved a total of 3,815 applicants to practice medicine in Michigan. In other words, twice as many were licensed to practice in Michigan as graduated from the two medical schools.

It should be pointed out that 45 per cent of the doctors in practice in counties outside of Wayne County were graduated from medical schools located outside of Michigan. It is highly probable that many of these were attracted to this state by the intern or resident training programs in hospitals approved for intern and resident training in Michigan at that time.

Statistical data available indicate that approximately 60 per cent of the interns and residents trained in hospitals outside of University or medical teaching centers will establish their practices in or near the community where they are trained. Thirteen Detroit area hospitals would take between 250 and 300 interns annually. These hospitals have had intern programs for many years which may be one of many reasons for the better doctor-patient ratio in the metropolitan area.

It has been estimated that the population of Michigan will increase by two and one-half to three million within the next fifteen to twenty years.

Presented by Drs. H. A. Towsley, J. M. Sheldon, and Howard H. Cummings to The Council at Grand Rapids, September 26, 1953, as a report of the Sub-committee in Intern Training as a Means of Procuring Physicians for Michigan. Published at the direction of The Council.

NOVEMBER, 1953

Each year the state loses approximately 100 practicing physicians through death, retirement, or transfer to other states.

The estimated population increase alone would require an additional 2,500 physicians in the next fifteen to twenty years, if we are to maintain our present low ratio.

If the present rate of losing physicians continues, an additional 2,000 more—or a total of at least 4,500 new doctors—will be needed to maintain our present low ratio in the next fifteen to twenty years.

How Can We Provide More Doctors for Michigan?

Medical School Graduates.—The University of Michigan Medical School and Wayne University College of Medicine will probably graduate approximately 260 to 275 medical students annually, or roughly 5,000 within the next twenty years.

If we could expect that all of these would practice in this state we might anticipate maintaining our present low ratio.

From past experience, however, there is every likelihood that approximately 30 per cent of this number will take their intern or residency training in hospitals outside of Michigan, leaving roughly 3,500 physicians to meet our needs.

Internship and Residency Training.—There are 34 hospitals in the state of Michigan as of July 1, 1953, approved for intern training. According to the matching plan these hospitals would have taken 555 interns in 1953-54.

Six hospitals failed to obtain any interns.

Twenty-nine hospitals appointed 350 interns, or 61.3 per cent of the total number of interns wanted in the state.

In 1951, thirty-two hospitals wanted 503 interns and obtained 305, or 70 per cent of the total number wanted.

Experience strongly suggests that hospitals with intern training programs play nearly an equal role in attracting young physicians to the state as medical schools do in producing young physicians for the state.

Therefore, if we are to improve upon our present doctor-patient ratio and meet the demand of the estimated increase of population in Michigan,

MEDICAL COVERAGE FOR MICHIGAN

it is of vital importance that those hospitals approved for intern training maintain acceptable intern training programs which will attract not only our own State Medical School graduates, but more graduates from schools outside of the state.

In February, 1953, the Council on Medical Education and Hospitals of the AMA published a revised edition of the *Essentials of an Approved Internship*. This publication sets forth the general requirements to be met in hospitals having approval for intern training.

At present there are approximately 11,000 positions for intern training in the country and approximately 6,500 to 7,000 medical graduates to fill these positions. Hence, there is a great probability that hospitals now approved for intern training that do not meet the standards set forth by the Council on Medical Education and Hospitals of the AMA will lose their approval for intern training.

It is of vital importance, therefore, that doctors practicing in hospitals approved for intern training in Michigan and the hospital administrative boards governing those hospitals, abide by the rules and regulations set forth by the Council on Medical Education and Hospitals.

It is the opinion of this Committee that every member of the Michigan State Medical Society should take an active interest in the establishment and maintenance of accredited intern training programs.

Your Committee therefore respectively recommends that the Council of the Michigan State Medical Society approve and encourage compliance with the *Essentials of an Approved Internship* as published in the February, 1953, issues of *The Journal of the American Medical Association* by the Council on Medical Education and Hospitals.

J. M. SHELDON, M.D.
E. D. SPALDING, M.D.
F. A. WEISER, M.D.
H. A. TOWSLEY, M.D., *Chairman*

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LOOK TO MICHIGAN - - -

(Continued from Page 1230)

March, 1953. Alpena-Alcona-Presque Isle County Medical Society confirms need.

April-May-June. Continued to make referrals.

Made field trip to explore community at first hand. August, 1953. Committee accepted invitation to visit Lansing office for discussion and planning.

September, 1953. Following personal interview with Dr. and Mrs. Quamme at Lansing office, MHC refers Dr. Quamme direct to Hillman.

September 28, 1953. Dr. Quamme decides to locate in Hillman.

October 5, 1953. MHC representative visits Hillman to assist in plans for open house and reception.

October 9, 1953. Dr. Quamme opens practice in Hillman.

Progress

Conceived as a long-range project, the progress to date has been gratifying. In the brief case studies given above it is obvious that a satisfactory start has been made. It is apparent that the challenge is being met and that we are moving toward our objective of providing an effective service which will assist the M.D. in making his important decision and help the community secure needed medical care.

Seventy per cent of all rectal and anal cancers, and 54 per cent of cancers of the large bowel, develop within reach of the physician's finger.

Routine palpation of the prostate in elderly patients is the best means of raising cancer survival rates.

The lower extremities are involved in 74 per cent of melanoma in negroes.

Melanoma occurs up to 4.4 times more frequently in whites.

JMSMS



Various factors during pregnancy (intestinal displacement, atony, inactivity) make it virtually impossible for most women to go through the gestation period without constipation.

CONSTIPATION IN PREGNANCY: *Satisfactorily controlled with Metamucil®*

Metamucil, with its physiologic principles of "smoothage" and "normohydration," is well tolerated for pregnancy constipation. This bland vegetable colloid may be used throughout the entire nine-month period without fear of forming a "habit" and without irritation to the mucosa.

Greenhill¹ suggests that Metamucil be given every other night. He also recommends that Metamucil be given in conjunction with a proper diet,

during the lying-in period of the puerperium.

Metamucil is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

HEALTH SCREENING FOR ADULTS

A health screening program for adults that may provide worthwhile data on the value and conduct of such a program was carried on in an Upper Peninsula town on October 5, 6 and 7.

Under the sponsorship of the Alger-Schoolcraft Health Department, with the assistance of the Michigan Department of Health, and with the approval of the local physicians and of management and labor in the plant involved, the 450 to 500 employees of the Munising Paper Company were offered a series of screening tests designed to pick up the beginning signs or indications of the major chronic diseases. Participation was entirely voluntary on the part of the workers and the screening was done on company time.

The screening procedure included checking height and weight, blood pressure, hemoglobin, blood specimens for syphilis and diabetes, chest x-ray for tuberculosis, heart abnormalities and cancer of the lungs, urine specimens for albumin, sugar and microscopic tests for indications of heart conditions.

The Powers laboratory of the Michigan Department of Health handled the laboratory work involved.

Each person screened gave the name of his doctor, and significant findings were reported directly to him. A card to the person with such findings informed him that the results of his tests had been reported to his doctor and urged that he get in touch with him. The person with negative findings was told by card that his screening indicated no abnormal conditions but that it was by no means a thorough medical examination and gave no final assurance that everything was all right.

The local health department is following up the persons with significant findings to try to make sure that they see their doctor, and having seen him that they return for needed treatment.

It is hoped that the program will give information on a number of points that need clarifying in the field of adult health and chronic disease control. It should indicate how successful such screening can be in finding incipient chronic disease in supposedly well, working-age men and women. It will give some data on the prevalence of such conditions. It will throw some light on possible costs of such a screening program and whether results justify the expenditure. It will help to determine what are practical screening levels, so that more than 50 per cent of those referred to physicians will be confirmed as abnormal.

The program should also help to work out a mutually satisfactory pattern of community co-operation between health department, practicing physicians, management and labor in promotion of adult health, with the health department carrying responsibility for preliminary screening to find persons in need of examination and medical

care, and following through on helping to make sure that such persons reach the office of their family doctor.

ACCIDENTS TAKE HEAVY TOLL OF PRESCHOOL CHILDREN

Last year in Michigan 341 boys and girls under five years old were killed in accidents and over half—55 per cent—in mishaps around the home.

"Mechanical suffocation" was said to take the heaviest toll in the home, claiming the lives of 61. There is, however, considerable speculation as to this as a cause of death. Studies indicate that many babies thought to have died of suffocation may actually have died of illness, signs of which had gone unnoticed in the days preceding death.

Choking from food, putting beans or marbles up the nose, or other instances of inhalation of or ingestion of objects causing obstruction or suffocation claimed 47 lives.

Fires and explosions—mostly fires—claimed the lives of 46 youngsters of preschool age; 18 met death from burns from hot substances, such as steam and boiling liquids; 76 were killed in motor vehicle accidents—47 as passengers, 29 as pedestrians; and 33 were drowned; 19 died as a result of falls and 13 from accidental poisoning.

DEPUTY DIRECTOR APPOINTED

Frank J. Condon, M.D., has been appointed deputy director of the Oakland County Health Department, in charge of the Royal Oak office.

NEW NUTRITION CONSULTANT

Miss Marie Buckley has joined the nutrition staff of the department, replacing Janet Wardlaw who resigned. Miss Buckley will work with the Wayne and Macomb county health departments.

TUBERCULOSIS DURING CHILDHOOD

(Continued from Page 1173)

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NEW LOCATION!
BRIGHTON HOSPITAL
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A view of Brighton Hospital from the air.

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"The finest and most unusual alcoholic hospital in America"

- No patients admitted unless sponsored by family physician, pastor or member of Alcoholics Anonymous.
- No patients admitted for less than one week's treatment.
- Excellent medical supervision and nursing care.

REASONABLE RATES

The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to proper hospitalization of alcoholics definitely seeking to stop drinking.

Harry Henderson, *President*
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Philip Neudeck, *Vice President*
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CHEERFUL SURROUNDINGS

IN MEMORIAM

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For controlled treatment of
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- Basically different in chemical structure
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Supplied: 1cc and 2cc ampuls in boxes of 12, 25 and 100, and 10 cc vials

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In Memoriam

ABRAHAM M. ALTSCHULER, M.D., of Detroit, who practiced in that city for thirty-nine years and was a Wayne County medical examiner for eighteen years, died August 27, 1953, at the age of sixty-two.

A member of a large family, most of whom were physicians, Dr. Altshuler was born in Russia and received his preliminary education in private schools. In 1912, he entered the Medical School of the University of Leipzig, Germany, later attending the University of Berne, Switzerland, Medical School, where he received his M.D. degree in 1917.

Dr. Altshuler came to the United States in 1922, entering general practice in Detroit shortly thereafter. By avocation he was a music lover and composer.

Dr. Altshuler is survived by his wife, Ray, and a brother, Ira Altshuler, M.D., Detroit psychiatrist.

ALVIN H. BENZ, M.D., of Ann Arbor, died August 20, 1953, at the age of forty-six.

Dr. Benz had practiced in Ann Arbor since 1946 and at the time of his death was on the staff of St. Joseph Mercy Hospital, Ann Arbor, and Beyer Memorial Hospital, Ypsilanti. From 1942 to 1946 he served as a major in the army medical corps.

A native of Dexter, Michigan, Dr. Benz was a graduate of the University of Michigan, receiving his M.D. degree in 1931. He interned at Harper Hospital, Detroit, and St. Luke's Hospital, Chicago, later becoming resident ophthalmologist at University of Michigan hospital in 1933. In 1935 he went to Chattanooga, Tennessee, where he practiced for seven years prior to World War II.

Dr. Benz is survived by his wife Bettye, and three sons by a previous marriage, Thomas A., Richard B., and Loren W., all of Cleveland. Also surviving are a brother, Raymond W. Benz of Ann Arbor, and a sister, Mrs. Clyde Earl of Long Beach, California.

ALVIN T. BONATHAN, M.D., a Flint physician and surgeon since 1930, died July 28, 1953, at the age of fifty-five.

Dr. Bonathan, a native of Hubbell, Michigan, was graduated from the University of Michigan Medical School in 1929. He took his undergraduate work at Michigan College of Mining and Technology and at Marquette University, Milwaukee. He was a veteran of World War I.

Dr. Bonathan was active in several Masonic organizations. He was a member of the International College of Surgeons and was former secretary of the Flint Academy of Surgery. He was a member of the medical staff of all three Flint hospitals and was a director of Merchants & Mechanics Bank.

He leaves his wife, three daughters, Mrs. Irwin G. Madison, Mrs. Richard A. Allan, and Bettie, all of Flint; three sisters, and a brother.

IN MEMORIAM

DONALD L. GORDON, M.D., of Oscoda, died September 3, 1953, at Hackensack, N. J., where he had been vacationing with his family. He was forty-four years old.

Dr. Gordon was a native of Detroit. He attended Kenyon College, Gambier, O., and was graduated from McGill University Medical School, Montreal, Que. Dr. Gordon interned at Mercy and Foote hospitals in Jackson, and at Royal Victoria Hospital, Montreal.

He practiced in Jackson before entering the Navy in 1942. After serving with the First Marine Division, Dr. Gordon was discharged in 1945 with the rank of Lieutenant Commander. He returned to his practice in Jackson, remaining there until 1948, when he moved to Oscoda.

Dr. Gordon is survived by his wife, Clare; a daughter, Kiltie, and his mother, Mrs. Grace Gordon, widow of a Detroit physician, now living in New York.

FRANK RIZZO, M.D., of Grosse Pointe Park, died September 13, 1953, at the age of forty-nine. Dr. Rizzo had lived in the Detroit area for thirty-seven years and was a member of the staff at St. Joseph's Mercy Hospital. He was a native of Trapani, Italy.

Dr. Rizzo was graduated from Wayne University in 1926 and from the Wayne University College of Medicine in 1929.

He is survived by his wife, Doris; a son, Frank; a daughter, Bridget, three brothers and one sister.

SEVERE URTICARIA

(Continued from Page 1210)

Summary

A case of severe allergic reaction to Butazolidin® characterized by urticaria and angio-edema is reported. Excellent results were obtained using repository adrenocorticotropic hormone.

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Dilaudid hydrochloride

(dihydromorphinone hydrochloride)

COUNCIL ACCEPTED



Powerful opiate analgesic - dose, 1/32 grain to 1/20 grain.

Potent cough sedative - dose, 1/128 grain to 1/64 grain.

Readily soluble, quick acting.

Side effects, such as nausea and constipation, seem less likely to occur.

An opiate, has addictive properties.

Dependable for relief of pain and cough, not administered for hypnosis.

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NEWS MEDICAL

MICHIGAN CLINICAL INSTITUTE

Sheraton-Cadillac Hotel, Detroit

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YOU ARE URGED TO ATTEND

MICHIGAN AUTHORS

V. K. Volk, M.D., Dr.P.H., F.A.P.H.A., County Commissioner of Health, Saginaw, is co-author of an article entitled "Reinoculation with Multiple Antigen Preparations of Free-living Children Previously Inoculated with Multiple Antigen Preparations" and an article entitled "Observations on the Effectiveness of Various Scarlet Fever Antigens Used in Combination with Other Antigens in Multiple Antigen Preparations," both published in the *American Journal of Public Health* and *The Nation's Health*, July, 1953.

Stefan S. Fajans, M.D., Ann Arbor, is the author of an article entitled "Aberrations of Potassium Metabolism in Clinical Medicine" published in the *American Practitioner and Digest of Treatment*, September, 1953.

Henry K. Ransom, M.D., Ann Arbor, is the author of an article entitled "Cancer of the Stomach," an abstract from *Surgery, Gynecology and Obstetrics*, which is published in *American Practitioner and Digest of Treatment*, September, 1953.

Hermann Pinkus, M.D., Monroe, is the author of a paper entitled "Premalignant Fibroepithelial Tumors of the Skin" published in the *Archives of Dermatology and Syphilology*, June, 1953.

William S. Reveno, M.D., Detroit, is the author of an article entitled "The Value of the Periodic Health Examination," abstracted in *Current Medical Digest*, August, 1953, from *THE JOURNAL MSMS*, May, 1953.

Reed M. Nesbit, M.D., University Hospital, Ann Arbor, is the author of an article entitled "Problems Relating to the Recognition of Hydronephrosis in Everyday Medical Practice" published in *Current Medical Digest*, August, 1953.

O. T. Mallory, Jr., M.D., Institute of Industrial Health, Ann Arbor, "Diagnosis of Occupational Disease" published in *Current Medical Digest*, September, 1953, abstracted from *THE JOURNAL MSMS*, June, 1953.

Vlado A. Getting, M.D., Dr.P.H., Ann Arbor, is the author of an article entitled "The Family Physician and the Public Health Department," published in *The Journal of the American Medical Association*, September 26, 1953.

A. D. Ruedemann, M.D., Detroit, is the author of an article "Foveal Co-ordination" in the *American Journal of Ophthalmology*, September, 1953.

Harry A. Towsley, M.D., University of Michigan Medical School, is the author of an article entitled "Why Didn't We Get All the Interns We Wanted?" published in *Hospitals*, October, 1953.

Edwin P. Vary, M.D., Flint, is the author of an article "Method of Gastrointestinal Anastomosis" appearing in *Archives of Surgery*, for September, 1953.

Robert E. L. Berry, M.D., Ann Arbor, is the author of an article entitled "Clinical Aspects of Acute Peripheral Oligemia from Plasma Water and Sodium Salt Loss," published in *Archives of Surgery*, September, 1953.

Laurence S. Fallis, M.D., and **James Barron, M.D.**, Detroit, are authors of an article entitled "Modified Technique for Total Colectomy in Ulcerative Colitis," published in *Archives of Surgery*, September, 1953.

Roland M. Athay, M.D., medical superintendent Wayne County General Hospital and Infirmary, Eloise, is the author of an article entitled "Hospital 'Cost Centers'—A Valid Concept for Chronic Care" abstracted in *Trustee*, the journal for hospital governing boards, August, 1953, from *THE JOURNAL MSMS*, May, 1953.

TELEVISION PROGRAM

"The March of Medicine"—over NBC and CBC-TV networks.

October 8—Hope for the Heart Patient.

November 5—A Report on the Fight Against Cancer.

December 3—Highlights from the AMA Clinical Meeting in St. Louis.

* * *

The Army, which had a physician-troop ratio of 3.61 on September 1, has begun redistribution of 450 newly commissioned physicians to the Navy (3.69 ratio) and Air Force (3.10 ratio). If these medical officers don't ask for interservice transfer, "then it may be necessary to detail some of them," Defense officials state. Overall ratio for the armed services September 1 was 3.49, according to the department. Last January the Health Resources Advisory Committee recommended the doctor ratio be reduced to 3.0, and in May Secretary of Defense Wilson directed that this ratio be reached by June 30, 1954. As late as June of this year, however, the ratio was 3.45. Since July 1 the department has stopped counting interns and counts only half of its residents in arriving at the doctor ratio. Previously, both groups were counted in full. On September 1, services listed 555 interns, 769 residents.

The redistribution program was announced simultaneously with disclosure that the military was halting drafting of physicians for an indefinite period. The department explained that it had so many volunteers after extension of the doctor draft and issuance of August call for 542 physicians, it did not have to resort to the draft. The department also said many doctors entitled to release under the new law are staying on, and that there are fewer deferments for professional training.—*AMA Washington Letter*.

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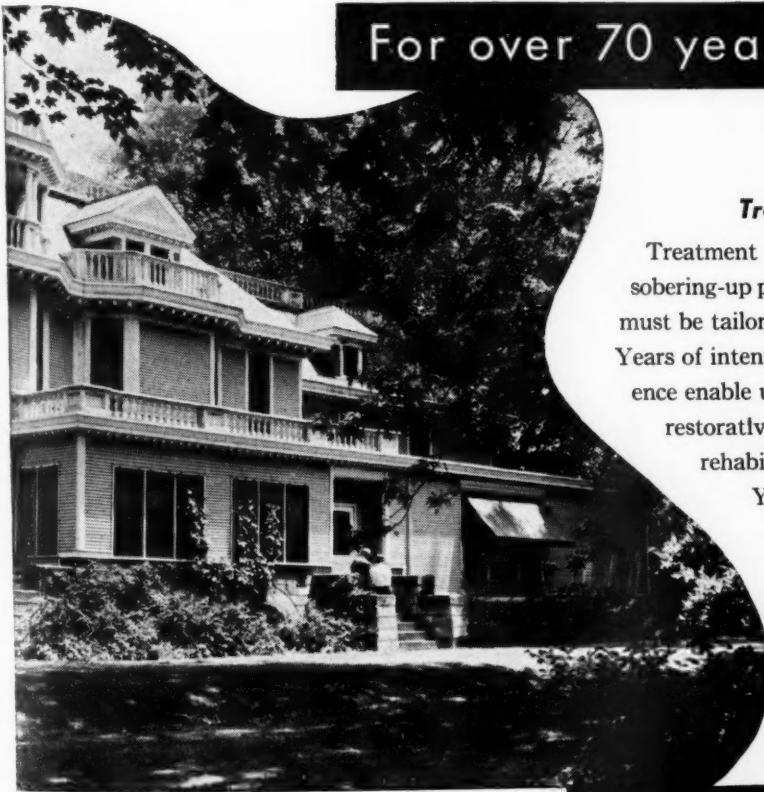
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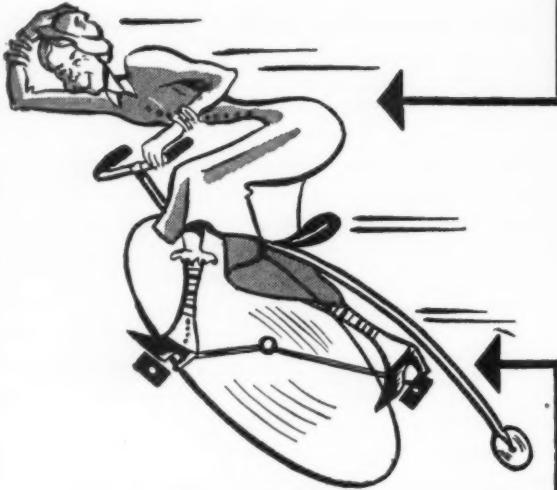
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NEW WAYNE MEDICAL SCHOOL BUILDING

On the fifteenth of October, 1953, the Wayne University College of Medicine accepted its new Medical Science Building which was erected on the medical college campus of the University by the State of Michigan. This building will provide 141,000 square feet of the most modern laboratory space for teaching and for research. It will house the departments of anatomy, microbiology, pathology, physiological chemistry and physiology and pharmacology and quarters for the basic services of a modern medical school. The administrative offices of the medical school will be moved to the new building. A cafeteria seating 400 persons is a part of the first floor.

This new facility will enable the Wayne University College of Medicine to accept classes of 100 students each. It is located close to the Detroit Receiving Hospital, the present College of Medicine buildings and the Detroit Memorial Hospital, a private institution. In this growing medical center area, the City of Detroit has recently completed and put into operation a new outpatient clinic building with special research floors for the College of Medicine, and last August the State started the construction of a Neuropsychiatric Institute to be operated by the College of Medicine. The total outlay in money for new construction is approximately thirteen million dollars. Other buildings are contemplated which will furnish Detroit with a modern medical center close to the heart of the city and in one of the most accessible regions in the whole area.

* * *

The scientific meeting of the Michigan Chapter of the American College of Chest Physicians was held in conjunction with the State meeting in Grand Rapids, September 23, 1953. The subject, "The Modern Medical and Surgical Treatment of Pulmonary Tuberculosis," was interesting enough to induce a well attended meeting and prompted a lively discussion between the Medical men and Surgeons.

Dr. Paul Chapman, of Detroit, led the discussion on the modern medical treatment and Dr. Richard Meade,

(Continued on Page 1240)



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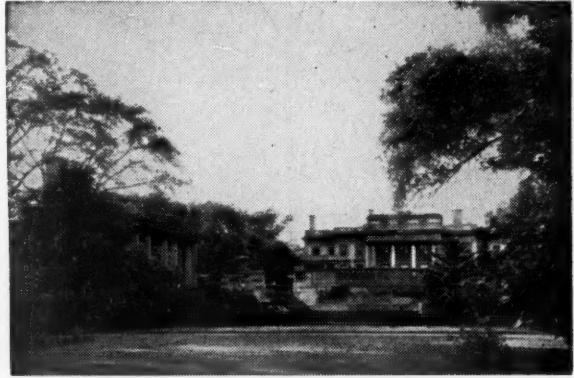
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NEWS MEDICAL

(Continued from Page 1240)

of Grand Rapids, the surgical phase. Dr. Lawrence Pratt, new president, was the moderator. Drs. Hudson and Dodrill summarized for the surgeons and Dr. Howes for the medical men.

Since the development of Streptomycin, Pas, and Isocytine Acid Hydrazide, the Tubercle Bacillus has been fighting a losing battle to survive within the human body. In the final discussion, Dr. Chapman stated that chemo-antibiotic therapy has proved to be a specific weapon in the fight against tuberculosis. However, there still will be plenty of work for the thoracic surgeons because too many cases go undiagnosed before destruction of pulmonary tissue develops.

* * *

Progress in the development of a practical polio vaccine was reported by Dr. Jonas E. Salk, research professor of bacteriology at the University of Pittsburgh School of Medicine.

The Pittsburgh scientist, whose studies are being supported with March of Dimes funds from the National Foundation for Infantile Paralysis, revealed that an additional 474 children and adults have been vaccinated with several experimental vaccines. The vaccines used have proved to be completely safe and capable of stimulating the production of polio antibodies.

Plans are now being made by the National Foundation for Infantile Paralysis for large scale testing of a polio vaccine to determine how effective it is in protecting against the disease under natural conditions of exposure.

In all parts of the country, the American people voluntarily increased their protection against the unexpected costs of hospital, surgical and medical care to new heights in 1952—reports the Health Insurance Council in its current annual survey of accident and health coverage in the United States. The AMA's Council on Medical Service is distributing copies of the report to medical schools, teaching hospitals, and state and county medical societies.

Organizations contributing data to the Insurance Council's report include insurance companies, Blue Cross, Blue Shield and various other independent plans sponsored by business and industry, employee benefit associations and private group clinics.

Statistical highlights of the report: Nearly 92 million covered against *hospital expense*, an increase of more than 5½ million over 1951; more than 73 million protected against *surgical expense*, an increase of more than 7½ million; nearly 36 million carried *medical expense* coverage, an increase of 8 million; more than 38 million protected by *disability insurance*, a new high. In addition, nearly 700,000 persons had *catastrophic coverage*—the newest form of voluntary health protection designed to help meet the catastrophic costs of very serious illness.

Additional copies of the report are available on request from the Council on Medical Service.—*AMA News Notes*.

* * *

The Woman's Auxiliary to the American Medical Association presented a check for \$10,000 to the AMEF during the Auxiliary's annual meeting in New York last

(Continued on Page 1244)

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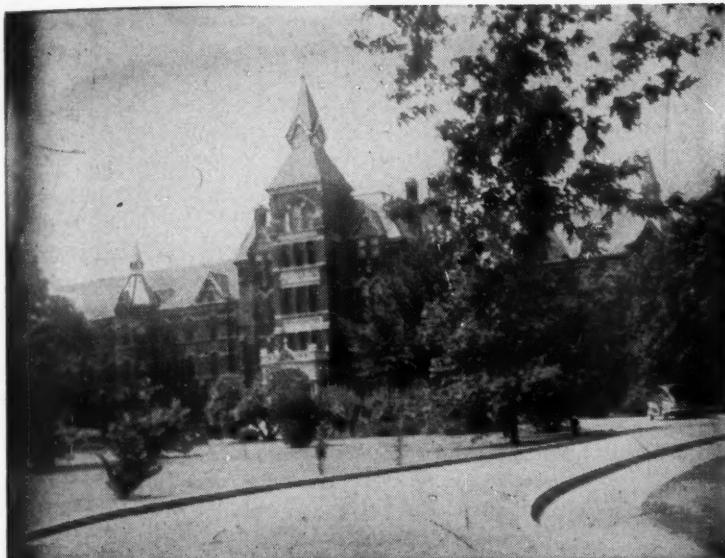
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\$25 weekly indemnity, accident and sickness		\$75 weekly indemnity, accident and sickness	
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Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00

COSTS (Quarterly)

Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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NEWS MEDICAL

(Continued from Page 1242)

June. In addition to the treasury gift, the various auxiliaries and their individual members have donated \$19,492.61 to the Foundation from June, 1952, through May, 1953.

* * *

Found in Civic Auditorium at 1953 MSMS Annual Session: Gold tie clasp with Fraternal emblem attached. Owner is requested to write MSMS, Box 539, Lansing, Michigan, and describe same.

* * *

The Michigan State Medical Assistants Society officers for the ensuing year are: President—Mrs. Elizabeth Peck, Detroit; Recording Secretary—Mrs. Marion Hiel, Lansing; Corresponding Secretary—Miss Haley Cummins Carol; Treasurer—Mrs. Marie Nielsen, Muskegon.

* * *

Hugh W. Brenneman, Lansing, MSMS Public Relations Counsel, has been invited to give the opening address at the first Public Relations Conference of the Ontario Medical Association, November 25, at the Royal York Hotel, Toronto. His topic will be "The Need for a Public Relations Programme."

Attending the conference will be representatives from the fifty-two branch societies of the OMA, as well as press and radio representatives.

* * *

V. K. Volk, M.D., Saginaw, Franklin H. Top, M.D., Iowa City, Iowa, and William E. Bunney, Ph.D., New

York, are authors of an article "Observations on the Effectiveness of Various Scarlet Fever Antigens Used in Combination with Other Antigens in Multiple Antigen Preparations" which appeared in the *American Journal of Public Health*, July, 1953.

* * *

Health Appointments.—President Eisenhower has made a number of appointments in his official family of interest to the medical profession. They are:

Melvin A. Casberg, M.D., to be Assistant Secretary of Defense for Health and Medical Affairs, a post whose establishment has been long advocated by the American Medical Association. Dr. Casberg will supervise the department's medical programs and advise the Secretary of Defense on health policies. Dr. Casberg, former dean of St. Louis University Medical School, has been serving as a special assistant to the Secretary. This post had been offered to a Michigan physician.

Harvey V. Higley of Marinette, Wisc., chairman of the board, Ansul Chemical Co., to be head of the Veterans Administration. He has been active for many years in the American Legion, serving as state commander and member of the Legion's National Executive Committee and National Retirement Committee. He succeeds Carl R. Gray, Jr., who recently resigned.

Russell R. Larmon, professor of administration at Dartmouth College, to be an Assistant Secretary of Health, Education, and Welfare. This is one of two Assistant Secretaries provided under Reorganization Plan 1 which elevated the Federal Security Agency to cab-

(Continued on Page 1246)

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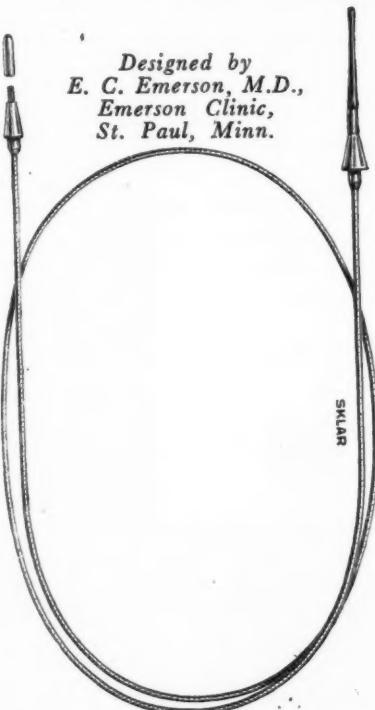
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NEWS MEDICAL

(Continued from Page 1244)
inet status. Prof. Larmon has served as consultant on many New Hampshire state commissions.

* * *

The American College of Physicians Regional Meeting for Michigan will be held in Ann Arbor on December 5, 1953. The scientific program will be held in the H. H. Rackham auditorium beginning at 9:30 a.m. Nineteen papers will be presented.

A reception and banquet will be held the evening of December 5 at the Allenel Hotel for members of the College and their guests.

The medical profession is extended a cordial invitation to attend the scientific sessions. For program, write

The Biddle Lecture, presented in Grand Rapids on September 23, 1953, at the 88th Annual Session of the Michigan State Medical Society by U. S. Senator Homer Ferguson was given under the sponsorship of the Michigan Foundation for Medical and Health Education, Inc. By official action of its Board, the Foundation will sponsor all Biddle Lectures at future MSMS Annual Sessions, as a memorial to the late Andrew P. and Grace Biddle.

The Council of the Michigan State Medical Society at its September 25 meeting in Grand Rapids, placed upon its minutes a vote of thanks to the Michigan Foundation for Medical and Health Education, Inc. (E. I. Carr, M.D., Lansing, President) for sponsorship of this lecture.

H. M. Pollard, M.D., Governor for Michigan, University Hospital, Ann Arbor.

* * *

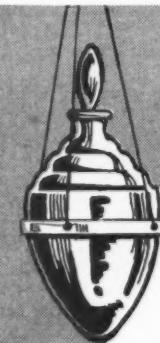
The American Society for the Study of Sterility announces its 1954 contest for the most outstanding contribution to the subject of infertility and sterility. A cash award of \$1,000 will be presented to the winner whose essay will appear on the program of the 1954 meeting. Essays must be received no later than March 1, 1954. For particulars, address the Society in care of Herbert H. Thomas, M.D., Secretary, 920 S. 19th Street, Birmingham, Alabama.

* * *

The National Foundation for Infantile Paralysis announces the availability of a number of additional post-doctoral fellowships to candidates whose interests are research in medicine and related biological and physical sciences. The fellowships cover from one to five years with stipends ranging from \$3,600 to \$7,000 a year. (Marital and dependency status is considered in determining individual awards.) For complete information, write the Foundation at 120 Broadway, New York 5.

* * *

Thirty weekly one-hour television programs have been inaugurated by the American Cancer Society in co-operation with the Columbia Broadcasting System to acquaint the medical profession with up-to-the-minute methods of detecting, diagnosing and treating cancer. The program is beamed over a closed circuit connecting medical centers in New York, Boston, Philadelphia, Pittsburgh,



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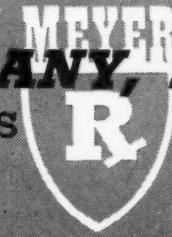
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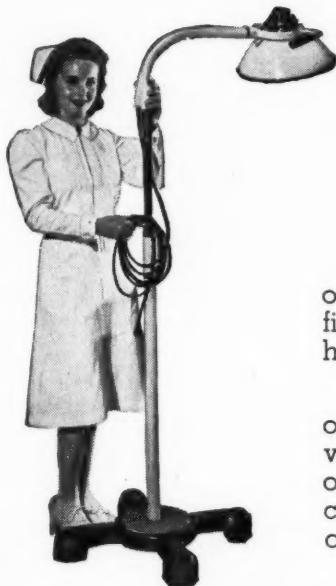
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Detroit, in co-operation with the local county medical society. The first year's shows will be telecast from specially constructed studios in New York's Memorial Cancer Center and the Francis Delafield Hospital attached to the Columbia Presbyterian Medical Center.

The programs, beginning October 21, are presented every Wednesday from 5 to 6 p.m. For complete program, write Mefford D. Ruggin, Executive Vice President, American Cancer Society, 47 Beaver St., New York 4.

* * *

Clark D. Brooks, M.D., Detroit, recently retired as a member of the Detroit Board of Education after serving in that capacity for fourteen years, twice as its president.

* * *

Alfred LaBine, M.D., Houghton, recently was honored when the fourth degree assembly of the Copper Country Knights of Columbus named its fifty candidate class for him, terming the initiatory group the "Sir Knight Dr. Alfred LaBine Class."

* * *

V. K. Volk, M.D., Saginaw, Health Commissioner Saginaw Department of Health, recently received a scroll, signed by 200 tuberculosis patients at Saginaw County Hospital, as a tribute for his role in bringing television into the room of every patient at the hospital.

* * *

The University of Michigan Medical School's Triennial Medical Alumni Conference was held in Ann Arbor on October 15-16-17. The program was presented by

twenty University of Michigan medical staff members and eight medical alumni outstanding in their specialties throughout the United States: Gould A. Anderson, M.D., of Oak Ridge, Tennessee; Carl W. Eberbach, M.D., Milwaukee; John C. Jones, M.D., Los Angeles; Thomas M. Durand, M.D., Philadelphia; Earl G. Osborn, M.D., New York City; and Carl A. Moyer, Dallas, Texas.

The guests were taken on a tour of the University Hospitals' new Outpatient Building and the Kresge Medical Research Building, the latter to be dedicated in December.

* * *

The Muskegon (Michigan) County Medical Society has developed its own automobile insignia—a modern design of the letters "M.D." superimposed on the words in a neat square "Muskegon County Medical Society." The design was originated by the son of C. L. A. Oden, M.D., of Muskegon—Constantine, Jr., better known as "Shalmy."

* * *

U. S.—State Aid Asked for Medical Care Plans: The House Interstate Commerce Committee (U. S. Congress) has been urged to give early consideration next year to a health insurance bill to provide federal and state grants to assist voluntary non-profit prepayment health plans, according to the Insurance Economics Society of America.

This bill is substantially the same as the measure introduced in 1949.

The plan is based on a fee of percentage of income

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* * *

Wm. J. Burns, Lansing, Executive Director of the Michigan State Medical Society, recently was honored by being made a Vice President of the American Trade Association Executives, an appointment announced by ATAE President Chester C. Kelsey of New York City. Mr. Burns is also on the Board of Directors of ATAE.

* * *

George M. Byington, M.D., formerly of Detroit, recently wrote regrets at his inability to attend the MSMS Annual Session in Grand Rapids. Dr. Byington is now with California's County of Santa Clara Health Department. His address is 2220 Moorpark Avenue, San Jose, California.

* * *

The Rockefeller Foundation reports appropriations of \$16,640,355 for the year 1952. Of this amount, \$3,599,698 was applied to work in medicine and public health.

* * *

The total number of persons covered against hospital expense, according to the Bureau of Accident and Health Underwriters, approaches the 92 million mark—an increase of 5½ million—7 per cent over 1951.

More than 73 million persons have surgical insurance, an increase of more than 7½ million—12 per cent over 1951.

Approximately 36 million persons are protected under medical expense coverage; this is 8 million more than in 1951—an increase of 29 per cent.

Detailed information is available from the Bureau, by writing L. A. Orisini, 60 John Street, New York 38, N. Y.

* * *

The International Congress of Obstetrics and Gynecology will be held at Geneva, Switzerland, July 26-31, 1954, under the sponsorship of the American Committee on Maternal Welfare, Inc.

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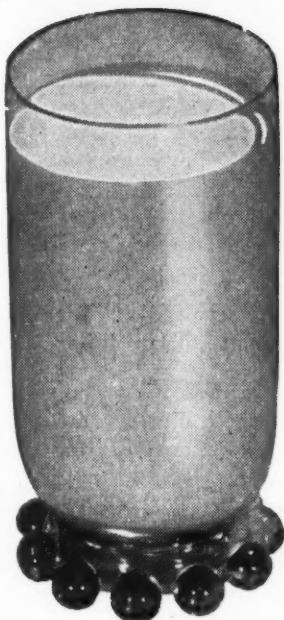
The Annual Clinic Day of the St. Clair County Medical Society was held at the Black River Country Club, Port Huron, on November 11. The program covered "Pediatrics in Practice" with the speakers from the medical faculty of the University of Michigan.

One hundred ten members of St. Clair County Medical Society and of neighboring counties attended the November 11 Clinic.

* * *

On to San Francisco for the AMA. The Union Pacific Railroad invites Michigan doctors to utilize the "City of San Francisco" for a pleasant 39-hour trip from Chicago to San Francisco for the June 21-25, 1954 AMA Annual Session.

The "City of San Francisco" departs from Chicago at 7:00 p. m. and arrives in San Francisco the second morning at 9:15 a. m. For detailed information and reservations, contact F. O. Fokansorka, General Agent, 612 Book Bldg., Detroit 26.



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MIDWINTER SEMINAR, FLORIDA

The eighth annual University of Florida Midwinter Seminar in Ophthalmology and Otolaryngology will be held at the Sans Souci Hotel in Miami Beach the week of January 18, 1954. The lectures on Ophthalmology will be presented on January 18, 19 and 20, and those on Otolaryngology on January 21, 22 and 23. A mid-week feature will be the Midwinter Convention of the Florida Society of Ophthalmology and Otolaryngology on Wednesday afternoon, January 20, to which all registrants are invited. The registrants and their wives may also attend the informal banquet at 8 p.m. on Wednesday. The Seminar schedule permits ample time for recreation.

The Seminar lecturers on Ophthalmology this year are Dr. W. B. Anderson, Durham, N. C.; Dr. W. P. Beetham, Boston; Dr. W. C. Owens, Baltimore; Dr. A. B. Reese and Dr. M. C. Wheeler, both of New York City. Those lecturing on Otolaryngology are Dr. E. N. Broyles,

Baltimore; Dr. H. P. House, Los Angeles; Dr. W. M. McNally, Montreal, Canada; Dr. Dorothy Wolff and Dr. D. Woodman, New York City.

NORTH SHORE LECTURE SERIES

Members of the Michigan State Medical Society are cordially invited to attend the Fourth Annual North Shore Health Resort Lecture Series. The lectures are being held at the hospital, 225 Sheridan Road, in Winnetka, Illinois, the first Wednesday of every month from October through June (second Wednesday in May) at 8:00 p.m.

The 1953-54 theme is "Treatment in Psychiatry." The first lecture, "The Problem of Psychiatric Referral," was given by Dr. Harold G. Wolff, Professor of Medicine (Neurology), Cornell University Medical College, New York; Attending Physician, New York Hospital, on Wednesday, October 7, 1953.

There is no charge.



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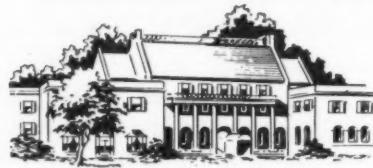


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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 1, 1954

Surgical Anatomy and Clinical Surgery, two weeks, starting March 15, 1954

General Surgery, two weeks, starting April 26, 1954

Surgery of Colon and Rectum, one week, starting March 1, 1954

Fractures and Traumatic Surgery, two weeks, starting March 1, 1954

GYNECOLOGY—Intensive Course, two weeks, starting February 15, 1954

Vaginal Approach to Pelvic Surgery, one week, starting March 1, 1954

OBSTETRICS—Intensive Course, two weeks, starting November 2, 1953, March 1, 1954

MEDICINE—Electrocardiography and Heart Disease, two weeks, starting March 15, 1954

Two-Week Intensive Course starting May 3, 1954

Gastroscopy, two weeks, starting March 8, 1954

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

FOOL'S HAVEN. A novel by C. C. Cawley, author of "No Trip Like This and Other Stories." Boston: House of Edinboro, 1953.

This comparatively short novel is interesting and challenging. It tells of a young man studying engineering who falls in love with the daughter of a widow who dislikes doctors and is a member of an unnamed religious sect which believes that all disease can be cured by prayer. Her tenet is that Jesus Christ was the greatest physician, and anything can be done by prayer, but if the doctor is called in, God will withdraw from the case because proper trust has not been shown.

Several times one of the family has been stricken. The father had undulant fever, and several doctors failed to cure him. This was before the family contact with the prayer-healing pastor. The young girl had an attack of appendicitis early in the acquaintance of the lovers. The young man had been operated upon once for a severe appendicitis, about to rupture. He had read a book and made his own diagnosis, went to a hospital and asked for relief. The diagnosis was confirmed. The mother refused to call a doctor for the girl, and she recovered. Several conflicts occur. Finally, the couple are to be married, and the day before, while attending a party, the bride-to-be is again stricken at the home of an aunt who called a doctor. Diagnosis was acute appendicitis and operation was advised without delay. The girl insisted on being taken to her home where the prayer healer advised against medical care, but called the congregation for prayer. The girl died. Health authorities would not allow burial of a patient who died without medical attention without an autopsy. An inquest resulted in indictment of mother and pastor for manslaughter. The pastor was acquitted and the mother convicted.

Much law and many controversies are cited. The book is very evidently written for propaganda. It also raises a question of why a mother who follows her pastor's advice not to call a doctor is guilty of manslaughter, while the man who gave the advice is not considered guilty. The publishers submitted many citations. Anyone who wishes may try to solve this old conundrum.

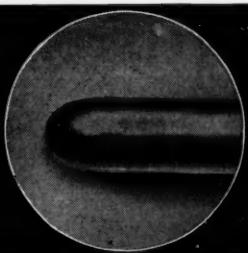
PRACTICAL X-RAY TREATMENT. By Arthur W. Erskine, M.D. Fourth Edition Revised and Enlarged. Saint Paul and Minneapolis; The Bruce Publishing Co., 1953. Price \$5.00.

The fourth edition of this book comes from the press posthumously. Dr. Erskine died in December, 1952.

This new edition puts forth the many thoughts and ideas found by the author to be practical in his hands. He covers all the conditions that have been found to respond to the use of radiation. There are several chapters devoted to physics, protection, and some of the social aspects of radiation therapy. It is possible to

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see many instances where this volume can be of definite value to those doing x-ray therapy.

The index is complete, and the bibliography is most convenient.

G.T.P.

MAY'S MANUAL OF THE DISEASES OF THE EYE.

For students and general practitioners. Edited by Charles A. Perera, M.D. 512 pages, Illus. Baltimore: Williams & Wilkins Company, 1953. Price \$6.00.

May's Manual of the Diseases of the Eye has been a standard for many years. One of the most compact and usable manuals that we know of. This is the twenty-first edition, and we believe it will be just as popular as its predecessors. It has the usual excellent printing arrangement, with very satisfactory color pictures of the retina.

PHYSIOLOGY OF EXERCISE. By Laurence E. Morehouse, Ph.D. Associate Professor of Physical Education, The University of Southern California; Formerly Research Fellow, Harvard Fatigue Laboratory, and Augustus T. Miller, Jr., Ph.D., M.D. Professor of Physiology, University of North Carolina Medical School. Illustrated, Second Edition. St. Louis: The C. V. Mosby Co., 1953. Price \$4.75.

Here is an extremely interesting book on a subject very poorly understood. References and outlines are made of how many of the extensive and detailed studies are made. Exercises under control, measuring oxygen intake, muscle fatigue, changes in body fluids, etc., are mentioned.

The first chapter is a study of the skeletal muscle tissue. There are twenty-eight chapters on such subjects as: The Nervous Control of Muscle Activity; The Metabolism of Muscle; Source of Energy for Muscle Contraction; Oxygen Requirements for Exercise; The Heart; The Heart Rate in Exercise; The Circulation of the Blood; Circulatory Adjustments in Exercise; Pulmonary Ventilation: Gas Exchange and Transport. An idea of the detail of the work is illustrated by the chapter on skills, ten pages. Examples of Skills, Quality of Champions, Factors which limit Skills, Body Weight, Body Height, Timing, Eye Muscle Co-ordination, Kinesthesia, Balance, Reaction Time, Speed of Movement, Precision, Muscular Tension, Visual Aim, Skill Center in the Brain, Learning, Specificity.

Each chapter is followed by from six to forty-seven references. The book also contains a much needed glossary. A most valuable book for physical education, athletics, soldier training and conditioning, as well as for general knowledge.

PEDIATRICS. By L. Emmett Holt, Jr., Professor of Pediatrics, New York University College of Medicine, Director, Children's Medical Service, Bellevue Hospital, New York, and Rustin McIntosh Carpentier, Professor of Pediatrics, Columbia University, and Director of the Pediatric Service in the Babies Hospital, New York, N.Y. Twelfth Edition. New York: Appleton-Century-Crofts, Inc., 1953.

This is the 1450-page twelfth edition of this book. It is completely rewritten and brought up to present-day practice and treatment. Such modern concepts of diag-

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R.J.C.

STEDMAN'S MEDICAL DICTIONARY of Words used in Medicine with their derivations and pronunciation including Dental, Veterinary, Chemical, Botanical, Electrical, Life Insurance and other special terms; Anatomical Tables of Titles in general use, the terms sanctioned by the Basle Anatomical Convention; The New British Anatomical Nomenclature; Pharmaceutical Preparations official in the U. S. and British Pharmacopoeias or contained in the National Formulary; Biographical sketches of the principal figures in the History of Medicine. Eighteenth Revised Edition with Etymologic and Orthographic Rules. Edited by Norman Burke Taylor, V.D., M.D., F.R.S.C., F.R.C.S. (Edin.) F.R.C.P. (Can.) M.R.C.S. (Lon.) University of Western Ontario and formerly of the University of Toronto in collaboration with Lieut. Col. Allen Ellsworth Taylor, D.S.O., M.A. Classical Editor. Baltimore: The Williams & Wilkins Co., 1953. Price \$11.50.

Stedman's Medical Dictionary has reached its 18th revised edition with this number. It has been greatly ex-

tended and amplified, covering 1661 pages. It is thumb-indexed, printed two columns to a page, in clear type, with black face index words. There are many illustrations, biographical sketches, also derivation and pronunciation of dental, veterinary, chemical, botanical, electrical, and life insurance terms.

It is very complete and usable and can be read without straining the eyes.

NEW AND NONOFFICIAL REMEDIES containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1953. Issued under the direction and supervision of The Council on Pharmacy and Chemistry, American Medical Association. Philadelphia, London, Montreal: J. B. Lippincott Company, 1953.

This volume is an annual publication and gets a little larger as new remedies are accepted. It lists and describes all products accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

A CENTURY OF MEDICINE 1848-1948. The History of the Medical Society of the State of Pennsylvania. Edited by Howard Kistler Petry, M.D. Medical Society of the State of Pennsylvania. Price \$5.00.

This is a publication of the Medical Society of the State of Pennsylvania, giving its history from 1848 to 1948. It tells of the historical background of organizing the society, and many stories of interest to Pennsylvanians.

It is a book of over 400 pages, interesting from an historical viewpoint.

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CHILDREN OF DIVORCE. By J. Louise Despert, M.D. Garden City, N. Y.: Doubleday & Company, Inc., 1953, Price \$3.50.

The author worked for seven years in the Payne Whitney Nursery School in New York. Her purpose in writing this book, she says, is to help save marriages—the marriages of today's children whose parents have failed at marriage. There are 350,000 divorces each year in the United States. There are a million and a half children of divorce under eighteen. Divorce, she believes, need not be disaster.

The author has learned from her files that it is not alone divorce that has created maladjusted children, but the emotional situation in the home, with or without divorce, that is the determining factor in a child's adjustment. She has found that an emotional divorce is much more distressing to children than a legal separation. To prevent some part of this grief and pain, she has written this book in order to prepare parents and children for separation. There are chapters with case histories for safeguarding the child. She presents a child's view of a failing marriage. There is a chapter on the courts and agencies. She closes the book with chapters on "Preparation for Marriage" and "Needs of Children." She stresses the primary need which, beside food and shelter, is love and reassurance.

She presents her material in a pleasing manner, with great understanding of the problem. The book may be safely recommended to all parents of children who are having marriage adjustment difficulties or who are contemplating divorce.

G.K.S.

A CENTURY OF MEDICINE in Jacksonville and Duval County. By Webster Merritt. Gainesville: University of Florida Press, 1949. Price \$3.50.

This compact history devotes considerable time to the early years in Jacksonville in the early 1840's with its epidemics, especially the yellow fever epidemic of 1857.

Physicians in the 1870's get consideration, also the Civil War.

Several chapters are devoted to yellow fever in Fernandina and Jacksonville, and the yellow fever epidemic of 1888. One chapter is devoted to the smallpox epidemic of 1883.

Many interesting pioneer doctors are mentioned.

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